

Earth Observing System

Output Data Products and Input Requirements

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Version 2.0

Volume II : Analysis of IDS Input Requirements

Science Processing Support Office (SPSO)

Goddard Space Flight Center

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6.0 INTRODUCTION

On January 18, 1991, NASA confirmed 29 Inter-Disciplinary Science (IDS) teams, each involving a group of investigators, to conduct interdisciplinary research using data products from EOS instruments. These studies are multi-disciplinary and require output data products from multiple EOS instruments, including both FI and PI instruments. The purpose of this volume is to provide information on output products expected from IDS investigators, required input data, and retrieval algorithms. Also included in this volume is the revised analysis of the "best" and "alternative" match data products for IDS input requirements. The original analysis presented in the August 1991 release of the SPSO Report has been revised to incorporate the restructuring of the EOS platform. As a result of the reduced EOS payload, some of EOS instruments were deselected and their data products would not be available for IDS research. Information on these data products is also presented in this volume.

7.0 INTERDISCIPLINARY STUDIES

7.1 Output Products

IDS output data products proposed by 29 investigators are presented in Appendix J. Many of the IDS data products are model outputs and require output products from EOS instruments as well as non-EOS data sources, including conventional measurements. In the subsequent sections, IDS EOS input requirements are discussed. Non-EOS data needed for IDS studies are described in Volume III of this report.

7.2 Analysis of Input Requirements

Listed in Appendix K are input data products required by IDS investigators for their studies. An independent analysis of earlier IDS input requirements was made by Schier and Way (1990). In their analysis, candidate source instruments were identified for each IDS input data product. SPSO further extended this analysis of the IDS input requirements and identified specific corresponding EOS output data products introducing the concept of best and alternative match (BM and AM) products well as source instruments. A best match data product is defined as an EOS data product that closely matches the IDS input requirements in terms of product definition, accuracy, temporal resolution, horizontal resolution and coverage, and vertical resolution and coverage. An alternative match product is a data product which meets the IDS requirements to a lesser degree, in comparison with a best match product.

Appendix L lists the best and the alternative match EOS data products for each of the required IDS input data products. The listing is organized by IDS input data product, arranged alphabetically by IDS investigator. In Appendix L, characteristics of the IDS input data products are given in *italics* for clarity. They are followed by characteristics of the EOS instrument output data products believed to match the specific IDS input requirement. For each of the best and the alternative match data products, information is

given on instrument, platforms, name(s) of the instrument team member(s) responsible for the output product, product ID number used in the Master Product List, match type, absolute and relative accuracy, temporal resolution, horizontal resolution and domain, and vertical resolution and domain (these attributes are described in Tables A-1 through A-4 in Appendix A of Volume I.)

The table in Appendix M is based on the same analysis used to generate the table in the Appendix L: however, it is organized according to the EOS instrument and investigator (generating the product) arranged alphabetically. For each of the proposed EOS instrument output products, all IDS input requirement "matches" are listed, thereby identifying which IDS investigators may need each listed output product. Information on the EOS instrument, platforms, output product, and product number is shown in *italics* for clarity. Following each EOS output product description, information is given on IDS investigator, IDS product number, match type, accuracy (absolute and relative), temporal resolution, horizontal resolution and coverage, and vertical resolution and coverage.

Table 7-1 presents an analysis of the number of IDS investigators (II's) requiring data products from each of the instruments to be launched on various EOS platforms. Note that the number of II's requiring data from a particular instrument *does not necessarily indicate the importance of that instrument*. Data products from MODIS and AIRS/AMSU-A/MHS are most frequently requested by IDS investigators, followed by those from MIMR, MISR, and ASTER. Twenty IDS investigators require data products from the HIRIS instrument which is not scheduled to fly until the AM-2 platform is launched in 2003. The assignment of HIRIS to the later two satellites of EOS-AM series would impact approximately 71% of the IDS investigators who require the at-launch standard products proposed by the HIRIS team, in that those data products will not become available until 2003.

The SPSO analysis of the IDS input requirement also includes the identification of the IDS input data not available from EOS instruments before 2001. Results of the analysis are presented in Appendix N, which is organized alphabetically by IDS investigator name. The IDS investigator name, required product name, and product number are listed in *italics* for clarity. For each input data product, the table lists the EOS platform, instrument, EOS investigator, product number, and the match type (e.g., BM and AM), accuracy (absolute and relative), temporal resolution, horizontal resolution and coverage, and vertical resolution and coverage for all products not meeting the input requirements before the year 2001. The IDS input products, which are required for the IDS investigation but will not be produced by any of the EOS instrument teams, are identified and listed in Appendix O. Table 7-2 summarizes the analysis of IDS investigators input product requirements. This lists the IDS investigators name, total number of products required, and number and percentages of these products not available prior to 2001. The table also lists the total number and percentage of the products that will not be available from the EOS instruments at any time in the future, according to the *currently* planned instrument output data product sets.

Table 7-1. EOS Instruments Required by IDS Investigators ¹

PLATFORM	INITIAL LAUNCH	INSTRUMENT CLUSTER	No. of IDS Investigators need the data	% of IDS Invsetigators need the data
AM-1	1998	ASTER	21	75%
		CERES	20	71%
		MISR	22	79%
		MODIS	26	93%
		MOPITT	6	21%
AERO	2000 ²	SAGE III	12	43%
PM	2000 ²	AIRS	26	93%
		AMSU-A/MHS	18	64%
		CERES	20	71%
		MIMR	22	79%
		MODIS	26	93%
ALT	2002 ²	ALT	10	36%
		GGI	3	11%
		GLRS-A	18	64%
CHEM	2002 ²	HIRDLS	10	36%
		SAGE III	12	43%
		STIKSCAT	14	50%
		TES	16	57%
AM-2,-3	2003 ²	CERES	20	71%
		EOSP	13	46%
		HIRIS	20	71%
		MISR	22	79%
		MODIS	26	93%
Mission of Opportunity (MO)	TBD	ACRIM	1	4%
		SOLSTICE	4	14%
		MLS ³	9	32%
		SAFIRE ³	7	25%

1. Not including LeMarshall whose input requirements are unspecified.

2. Subsequent platforms in the series will be launched every 5 years.

3. Descoped beyond 2001 (only one of the instruments will be selected).

**Table 7-2. Summary Analysis of IDS Investigators'
Input Data Requirements**

IDS Investigator	Total No. of Products	No. of Products Not Available Before 2001	% of Products Not Available Before 2001	No. of Products Not Available At All From EOS	% of Products Not Available At All From EOS
Abbott	22	6	27%	2	9%
Barron	120	37	31%	20	17%
Bates	87	23	26%	19	22%
Brewer	30	11	37%	3	10%
Batista, Richey	18	5	28%	0	0%
Cihlar	21	3	14%	4	19%
Dickinson	97	13	13%	19	20%
Dozier	10	6	60%	2	20%
Grose	33	30	91%	2	6%
Hansen	41	21	51%	3	7%
Harris	40	13	33%	4	10%
Hartmann	17	4	24%	1	6%
Isacks	41	14	34%	8	20%
Kerr, Sorooshian	57	19	33%	13	23%
Lau	53	10	19%	20	38%
Liu	11	4	36%	1	9%
Moore	37	20	54%	8	22%
Mouginis-Mark	23	18	78%	1	4%
Murakami	24	7	29%	4	17%
Pyle	33	29	88%	3	9%
Rothrock	20	2	10%	4	20%
Schimel	18	9	50%	2	11%
Schoeberl	47	33	70%	11	23%
Sellers	26	8	31%	2	8%
Simard	30	10	33%	4	13%
Srokosz	23	9	39%	2	9%
Tapley	4	2	50%	1	25%
Wielicki	46	7	15%	2	4%
TOTAL	1029	373	36 %	165	16 %

**Output Data Products
Listed by
IDS Investigator**

Appendix J

**Science Processing Support Office (SPSO)
Goddard Space Flight Center**

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Appendix J: Output Data Products Listed by IDS Investigator

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol. :: Cover.	Vertical Resol. :: Cover.
1469	Heat Flux, Latent	Abbott	W/m ²	40 W/m ² :: TBD	1/wk	50 km :: Ocean [Southern]	:: Sfc
3092	Ocean Current Velocity	Abbott	cm/s		1/day	10 km :: Ocean [Southern]	N/A :: Sfc
3094	Ocean Current Velocity, Geostrophic	Abbott	cm/s		1/mo	:: Ocean [Southern]	N/A :: TOO
3102	Ocean Eddy Kinetic Energy	Abbott	g/cm ² /s ²		1/(3 mo)	:: Ocean [Southern]	:: Sfc
3113	Sea_Level Height-Change	Abbott	cm RMS	4-6cm RMS :: TBD	2/day	4.5 x 7.5 dg :: G	:: TOA
2004	Albedo, Planetary Spectral, TOA	Barron	fraction		2/day	2.8 x 2.8 dg :: G	:: TOA
2005	Albedo, Planetary Spectral, TOA	Barron	fraction		? 5000 yrs	5 km :: 2 sites	
2779	Bedrock Lithology	Barron			1/mission	10 km :: Land/R	
2815	Bedrock Lithology	Barron			1/mission	100 km :: Land	
2816	Bedrock Lithology	Barron			2/day	4.5 x 7.5 dg :: G	
1786	Cloud Condensation Rate, Total	Barron	kg/m ² /s		2/day	2.8 x 2.8 dg :: G	
1787	Cloud Condensation Rate, Total	Barron	kg/m ² /s		2/day	2.8 x 2.8 dg :: G	
2064	Cloud Cover	Barron	%		1/day	10 km :: R	
2065	Cloud Cover	Barron	%		1/(5 min)	30 km :: [East. U.S.]	
2066	Cloud Cover	Barron	%		1/(5 min)	2 km :: [East. U.S.]	
2089	Cloud Cover	Barron	fraction		2/day	4.5 x 7.5 dg :: G	
2090	Cloud Cover	Barron	fraction		2/day	2.8 x 2.8 dg :: G	
2117	Cloud Emissivity	Barron	fraction		2/day	4.5 x 7.5 dg :: G	
2118	Cloud Emissivity	Barron	fraction		2/day	2.8 x 2.8 dg :: G	
1912	Cloud Liq_water Content	Barron	g/cm ³		1/(6 hr)	1 dg :: G	15-20 lw ::
1913	Cloud Liq_water Content	Barron	g/cm ³		1/(6 hr)	1 dg :: G	15-20 lw ::
1914	Cloud Liq_water Content	Barron	g/kg		1/hr	20-100 km :: R	
1915	Cloud Liq_water Content	Barron	g/kg		1/hr	1 km :: R	
2770	Erosion Chemical Denudation	Barron	mm/kyr		1/yr	10 km :: Land/R	
2771	Erosion Chemical Denudation	Barron	mm/kyr		1/yr	100 km :: Land	
2782	Erosion Sediment Yield	Barron	kg/km ²		? 5000 yr	5 km :: 2 sites	
2852	Geopotential Gravity Field	Barron	m ² /s ²		2/day	4.5 x 7.5 dg :: G	
2853	Geopotential Gravity Field	Barron	m ² /s ²		2/day	2.8 x 2.8 dg :: G	
2130	Heat Flux	Barron	W/m ²		1/day	200 km :: R	
1494	Heat Flux Convergence, Eddy	Barron	W/m ²		1/(5 day)	2.5 dg :: G	10 lw ::
1495	Heat Flux Rate, Latent	Barron	mb ?		2/day	4.5 x 7.5 dg :: G	
1496	Heat Flux Rate, Latent	Barron	mb ?		2/day	2.8 x 2.8 dg :: G	
1470	Heat Flux, Latent	Barron	W/m ²		1/(5 day)	2.5 dg :: G	10 lw ::
1480	Heat Flux, Sensible	Barron	W/m ²		2/day	4.5 x 7.5 dg :: G	
1481	Heat Flux, Sensible	Barron	W/m ²		2/day	2.8 x 2.8 dg :: G	
1482	Heat Flux, Sensible	Barron	W/m ²		1/day	10 km :: R	:: Sfc
1488	Heat Flux, Sfc	Barron	W/m ²		1/(5 day)	2.5 dg :: G	10 lw ::
1489	Heat Flux, Sfc	Barron	W/m ²		1/(5 min)	30 km :: [East. U.S.]	:: Afc
1490	Heat Flux, Sfc	Barron	W/m ²		1/hr	20-100 km :: R	:: Sfc
1491	Heat Flux, Sfc	Barron	W/m ²		1/(5 min)	500 m :: [East. U.S.]	:: Afc
2132	Heat Flux, Sfc	Barron	W/m ²		1/day	200 km :: R	:: Sfc
3100	Heat Flux, Zonal mean	Barron	W/m ²		1/(5 day)	2.5 dg/M :: G	10 lw ::
1450	Heating Rate, LW_Radiative	Barron	K/s		2/day	4.5 x 7.5 dg :: G	
1451	Heating Rate, LW_Radiative	Barron	K/s		2/day	2.8 x 2.8 dg :: G	
1453	Heating Rate, SW_Radiative	Barron	K/s		2/day	4.5 x 7.5 dg :: G	:: Sfc

Appendix J: Output Data Products Listed by IDS Investigator

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol. :: Cover.	Vertical Resol. :: Cover.
1454	Heating Rate, SW Radiative	Barron	K/s		2/day	2.8 x 2.8 dg :: G	
1455	Heating Rate, U-horizontal_Diffusive	Barron	K/s		2/day	4.5 x 7.5 dg :: G	
1456	Heating Rate, U-horizontal_Diffusive	Barron	K/s		2/day	2.8 x 2.8 dg :: G	
1457	Heating Rate, U-horizontal_Diffusive	Barron	K/s		2/day	4.5 x 7.5 dg :: G	
1458	Heating Rate, U-horizontal_Diffusive	Barron	K/s		2/day	2.8 x 2.8 dg :: G	
1459	Heating Rate, V-horizontal_Diffusive	Barron	K/s		2/day	4.5 x 7.5 dg :: G	
1460	Heating Rate, V-horizontal_Diffusive	Barron	K/s		2/day	2.8 x 2.8 dg :: G	
1461	Heating Rate, V-horizontal_Diffusive	Barron	K/s		2/day	4.5 x 7.5 dg :: G	
1462	Heating Rate, V-horizontal_Diffusive	Barron	K/s		2/day	2.8 x 2.8 dg :: G	
1443	Heating, Convective	Barron	W/m^3		1/hr	20-100 km :: R	
1444	Heating, Convective	Barron	W/m^3		1/hr	1 km :: R	
1445	Heating, East-West Sfc-stress	Barron	J/m^2/s		2/day	4.5 x 7.5 dg :: G	
1446	Heating, East-West Sfc-stress	Barron	J/m^2/s		2/day	2.8 x 2.8 dg :: G	
1449	Heating, Net Diabatic	Barron	W/m^2		1/(5 day)	2.5 dg :: G	
1447	Heating, North-South Sfc-stress	Barron	J/m^2/s		2/day	4.5 x 7.5 dg :: G	10 lv ::
1448	Heating, North-South Sfc-stress	Barron	J/m^2/s		2/day	2.8 x 2.8 dg :: G	
1829	Humidity	Barron	g/kg		1/hr	20-100 km :: R	
1830	Humidity	Barron	g/kg		1/hr	1 km :: R	
1831	Humidity Profile	Barron	g/cm^3		1/(6 hr)	1 dg :: G	15-20 lv ::
1880	Humidity Profile, PBL	Barron	g/kg		1/day	10 km :: R	:: PBL
1439	Humidity, Specific	Barron	g/kg		1/(5 min)	30 km :: [East. U.S.]	
1440	Humidity, Specific	Barron	g/kg		1/(5 min)	500 m :: [East. U.S.]	
1882	Humidity, Specific	Barron	kg/kg		2/day	4.5 x 7.5 dg :: G	
1883	Humidity, Specific	Barron	kg/kg		2/day	2.8 x 2.8 dg :: G	
1886	Humidity-Change, Specific, Convective_Adjusted	Barron	kg/kg/s		2/day	4.5 x 7.5 dg :: G	
1887	Humidity-Change, Specific, Convective_Adjusted	Barron	kg/kg/s		2/day	2.8 x 2.8 dg :: G	
1888	Humidity-Tendency, Specific	Barron	kg/kg/s		2/day	4.5 x 7.5 dg :: G	
1889	Humidity-Tendency, Specific	Barron	kg/kg/s		2/day	2.8 x 2.8 dg :: G	
2945	Ice Sheet Mass balance	Barron	cm/yr		1/yr	2.8 x 2.8 dg :: G	
2933	Infiltration	Barron	mm/s		1/event, 1/mo, 1/yr	100 km :: Antarctica	
2934	Infiltration	Barron	mm/s		1/event, 1/mo, 1/yr	30-90 m :: R	
2935	Infiltration	Barron	mm/s		1/event, 1/mo, 1/yr	900 m :: R	
2486	Land_sfc Temperature	Barron	C		1/(5 min)	18 km :: R	
2487	Land_sfc Temperature	Barron	C		1/(5 min)	30 km :: [East. U.S.]	
2494	Land_sfc Temperature	Barron	K		1/(5 min)	500 m :: [East. U.S.]	
2495	Land_sfc Temperature	Barron	K		2/day	4.5 x 7.5 dg :: G	:: Sfc
2813	Mineral Flux, XXX Geochemical	Barron	eq/km^2/yr		1/day	2.8 x 2.8 dg :: G	:: Sfc
2814	Mineral Flux, XXX Geochemical	Barron	eq/km^2/yr		1/day	1 km :: Land/R	
1847	Moisture Flux	Barron	kg (H2O)/m^2		1/day	10 km :: Land	
1848	Moisture Flux, Sfc	Barron	W/m^2		1/mo	10 x 10 km :: N. Atlantic	
1849	Moisture Flux, Sfc	Barron	g/m^2/s		1/day	10 km :: R	N/A :: Sfc
1850	Moisture Flux, Sfc	Barron	g/m^2/s		1/(5 min)	30 km :: [East. U.S.]	:: Sfc
1851	Moisture Flux, Sfc	Barron	g/m^2/s		1/hr	20-100 km :: R	:: Sfc
1876	Precipitable Water	Barron	g/kg ?		1/(5 min)	500 m :: [East. U.S.]	:: Sfc
1877	Precipitable Water	Barron	g/kg ?		1/hr	20-100 km :: R	
					1/hr	1 km :: R	

Appendix J: Output Data Products Listed by IDS Investigator

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
1946	Precipitation Amount, Convective	Barron	m/s ?		2/day	4.5 x 7.5 dg :: G	
1947	Precipitation Amount, Convective	Barron	m/s ?		2/day	2.8 x 2.8 dg :: G	
1952	Precipitation Amount, Large-scale_stable	Barron	m/s ?		2/day	4.5 x 7.5 dg :: G	
1953	Precipitation Amount, Large-scale_stable	Barron	m/s ?		2/day	2.8 x 2.8 dg :: G	
1956	Precipitation Amount, Rain	Barron	g/cm^3		1/6 hr	1 dg :: G	15-20 ml ::
2994	Precipitation Amount, Snow	Barron	m		2/day	4.5 x 7.5 dg :: G	
2995	Precipitation Amount, Snow	Barron	m		2/day	2.8 x 2.8 dg :: G	
1985	Precipitation Amount, Snow, Convective	Barron	m/s		2/day	4.5 x 7.5 dg :: G	
1986	Precipitation Amount, Snow, Convective	Barron	m/s		2/day	2.8 x 2.8 dg :: G	
1987	Precipitation Amount, Snow, Large-scale_Stable	Barron	m/s		2/day	4.5 x 7.5 dg :: G	
1988	Precipitation Amount, Snow, Large-scale_Stable	Barron	m/s		2/day	2.8 x 2.8 dg :: G	
1951	Precipitation Conc, Ice	Barron	g/cm^3		1/6 hr	1 dg :: G	15-20 ml ::
1962	Precipitation Rate	Barron	cm/hr		1/hr	20-100 km :: R	
1980	Precipitation Rate, Rain	Barron	cm/hr		1/5 min [?]	30 km :: [East. U.S.]	
1981	Precipitation Rate, Rain	Barron	cm/hr		1/5 min [?]	500 m :: [East. U.S.]	
1521	Pressure	Barron	mb		1/hr	20-100 km :: R	
1522	Pressure	Barron	mb		1/hr	1 km :: R	
1534	Pressure, Sfc	Barron	Pa		2/day	4.5 x 7.5 dg :: G	N/A :: Sfc
1535	Pressure, Sfc	Barron	Pa		2/day	2.8 x 2.8 dg :: G	N/A :: Sfc
1538	Pressure-Tendency, Sfc	Barron	Pa/s		2/day	4.5 x 7.5 dg :: G	N/A :: Sfc
1539	Pressure-Tendency, Sfc	Barron	Pa/s		2/day	2.8 x 2.8 dg :: G	N/A :: Sfc
2143	Radiative Flux Convergence	Barron	W/mr^2/km		1/5 day	2.5 dg :: G	10 ml ::
2155	Radiative Flux, LW, Average_Net	Barron	W/mr^2		2/day	4.5 x 7.5 dg :: G	:: TOA
2156	Radiative Flux, LW, Average_Net	Barron	W/mr^2		2/day	2.8 x 2.8 dg :: G	:: TOA
2159	Radiative Flux, LW, Clear-sky	Barron	W/mr^2		2/day	4.5 x 7.5 dg :: G	:: Sfc
2160	Radiative Flux, LW, Clear-sky	Barron	W/mr^2		2/day	2.8 x 2.8 dg :: G	:: Sfc
2161	Radiative Flux, LW, Clear-sky	Barron	W/mr^2		2/day	4.5 x 7.5 dg :: G	:: TOA
2162	Radiative Flux, LW, Clear-sky	Barron	W/mr^2		2/day	2.8 x 2.8 dg :: G	:: TOA
2139	Radiative Flux, Net_Down	Barron	W/mr^2		2/day	4.5 x 7.5 dg :: G	
2140	Radiative Flux, Net_Down	Barron	W/mr^2		2/day	2.8 x 2.8 dg :: G	
2441	Radiative Flux, Solar, Ave-absorbed	Barron	W/mr^2		2/day	4.5 x 7.5 dg :: G	
2442	Radiative Flux, Solar, Ave-absorbed	Barron	W/mr^2		2/day	2.8 x 2.8 dg :: G	
2133	Radiative Flux, Solar, Net_Down	Barron	W/mr^2		2/day	4.5 x 7.5 dg :: G	:: Sfc
2134	Radiative Flux, Solar, Net_Down	Barron	W/mr^2		2/day	2.8 x 2.8 dg :: G	:: Sfc
2444	Radiative Flux, Solar, Sfc Clear-sky	Barron	W/mr^2		2/day	4.5 x 7.5 dg :: G	:: Sfc
2446	Radiative Flux, Solar, Sfc Clear-sky	Barron	W/mr^2		2/day	2.8 x 2.8 dg :: G	:: Sfc
2443	Radiative Flux, Solar, TOA Clear-sky	Barron	W/mr^2		2/day	4.5 x 7.5 dg :: G	:: TOA
2445	Radiative Flux, Solar, TOA Clear-sky	Barron	W/mr^2		2/day	2.8 x 2.8 dg :: G	:: TOA
2890	River Discharge	Barron	mr^3/s		1/event, 1/mo, 1/yr	30-90 m :: R	
2891	River Discharge	Barron	mr^3/s		1/event, 1/mo, 1/yr	900 m :: R	
2892	River Discharge	Barron	mr^3/s		1/event, 1/mo, 1/yr	18 km :: R	
2992	Runoff, Soil Moisture	Barron	m/s		2/day	4.5 x 7.5 dg :: G	
2993	Runoff, Soil Moisture	Barron	m/s		2/day	2.8 x 2.8 dg :: G	
3143	Sea_Ice Conc	Barron	%		1/day	50 km :: Ocean/Cryo	
3146	Sea_Ice Conc, GCM	Barron	%		1/day	4.5 x 7.5 dg :: G	

Appendix J: Output Data Products Listed by IDS Investigator

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol. :: Cover.	Vertical Resol. :: Cover.
3147	Sea_Ice Conc. GCM	Barron	%		1/day	2.8 x 2.8 dg :: G	
3176	Sea_Ice Conc. Multi-year	Barron	%		1/season	50 km ::	
3179	Sea_Ice Cover	Barron	%		1/day	50 km :: Ocean/Cryo	
3185	Sea_Ice Cover	Barron	cm		1/day	4.5 x 7.5 dg :: G	
3184	Sea_Ice Fraction, Open-water	Barron	m		[ice response]	[criti feat] :: [modern ice]	N/A :: Sfc
3186	Sea_Ice Max Extent	Barron	cm		1/day	2.8 x 2.8 dg :: G	
3114	Sea_Level Height-Change	Barron	m		[ice response]	G ave :: G	N/A :: Sfc
2454	Sea_sfc Brightness Temperature (Radiance)	Barron	K		1/(5 day)	2.5 dg :: G	
2969	Soil Moisture	Barron	mm		1/event, 1/mo, 1/yr	30-90 m :: R	
2970	Soil Moisture	Barron	mm		1/event, 1/mo, 1/yr	900 m :: R	
2971	Soil Moisture	Barron	mm		1/event, 1/mo, 1/yr	18 km :: R	
3067	Soil Moisture	Barron	m		2/day	4.5 x 7.5 dg :: Land	N/A :: Sfc
3068	Soil Moisture	Barron	m		2/day	2.8 x 2.8 dg :: Land	N/A :: Sfc
2955	Surface Water Saturated Area	Barron			1/event, 1/mo, 1/yr	30-90 m :: R	
2956	Surface Water Saturated Area	Barron			1/event, 1/mo, 1/yr	900 m :: R	
2957	Surface Water Saturated Area	Barron			1/event, 1/mo, 1/yr	18 km :: R	
1589	Temperature Profile	Barron	K		2/day	4.5 x 7.5 dg :: G	
1590	Temperature Profile	Barron	C		1/(5 min)	30 km :: [East. U.S.]	
1591	Temperature Profile	Barron	K		1/hr	20-100 km :: R	
1592	Temperature Profile	Barron	K		2/day	2.8 x 2.8 dg :: G	
1593	Temperature Profile	Barron	C		1/(5 min)	500 m :: [East. U.S.]	
1594	Temperature Profile	Barron	K		1/hr	1 km :: R	
1628	Temperature, Dry-bulb, PBL	Barron	K		1/day	10 km :: R	:: PBL
1634	Temperature-Change, Convective_Adjustment	Barron	K/s		2/day	4.5 x 7.5 dg :: G	
1635	Temperature-Change, Convective_Adjustment	Barron	K/s		2/day	2.8 x 2.8 dg :: G	
1636	Temperature-Tendency	Barron	K/s		2/day	4.5 x 7.5 dg :: G	
1637	Temperature-Tendency	Barron	K/s		2/day	2.8 x 2.8 dg :: G	
2840	Topographic Elevation, Land_sfc	Barron	km		? 5000-yr	5 km :: 2 sites	
1792	Vegetation Evapotrans	Barron	W/m ² ?		1/event, 1/mo, 1/yr	30-90 m :: R	
1793	Vegetation Evapotrans	Barron	W/m ² ?		1/event, 1/mo, 1/yr	900 m :: R	
1794	Vegetation Evapotrans	Barron	W/m ² ?		1/event, 1/mo, 1/yr	18 km :: R	
1506	Vertical Motion	Barron	cm/s		1/hr	1 km :: R	
1507	Vertical Motion	Barron	cm/s		1/hr	20-100 km :: R	
1504	Vertical Motion, Omega	Barron	Pa/s		2/day	2.8 x 2.8 dg :: G	
1505	Vertical Motion, Omega	Barron	Pa/s		2/day	4.5 x 7.5 dg :: G	
1508	Vertical Motion, Omega	Barron	Pa/s		1/(6 hr)	1 dg :: G	15-20 hrl ::
1704	Wind Direction	Barron	dg		1/(5 min)	30 km :: [East. U.S.]	
1705	Wind Direction	Barron	dg		1/(5 min)	500 m :: [East. U.S.]	
1721	Wind Speed	Barron	m/s		1/(5 min)	30 km :: [East. U.S.]	
1722	Wind Speed	Barron	m/s		1/(5 min)	500 m :: [East. U.S.]	
1723	Wind Speed	Barron	m/s		1/hr	20-100 km :: R	
1724	Wind Speed	Barron	m/s		1/hr	1 km :: R	
1736	Wind Speed, Meridional	Barron	m/s		2/day	4.5 x 7.5 dg :: G	
1737	Wind Speed, Meridional	Barron	m/s		2/day	2.8 x 2.8 dg :: G	
1740	Wind Speed, Zonal	Barron	m/s		2/day	4.5 x 7.5 dg :: G	

Appendix J: Output Data Products Listed by IDS Investigator

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol. :: Cover.	Vertical Resol. :: Cover.
1741	Wind Speed, Zonal	Barron	m/s		2/day	2.8 x 2.8 dg :: G	
1558	Wind Stress, Meridional	Barron	N/m^2		2/day	2.8 x 2.8 dg :: G	Sfc ::
1750	Wind Stress, Meridional	Barron	N/m^2		2/day	4.5 x 7.5 dg :: G	Sfc ::
1747	Wind Stress, Zonal	Barron	N/m^2		2/day	4.5 x 7.5 dg :: G	Sfc ::
1748	Wind Stress, Zonal	Barron	N/m^2		2/day	2.8 x 2.8 dg :: G	Sfc ::
1696	Wind U Tendency	Barron	m/s^2		2/day	2.8 x 2.8 dg :: G	
1698	Wind U Tendency	Barron	m/s^2		2/day	4.5 x 7.5 dg :: G	
1647	Wind V Tendency	Barron	m/s^2		2/day	4.5 x 7.5 dg :: G	
1648	Wind V Tendency	Barron	m/s^2		2/day	2.8 x 2.8 dg :: G	
3163	Wind Velocity	Barron	km		[ice response]	[crit feat] :: [modern ice]	N/A :: Sfc
1377	Acceleration, Diffusive_Meridional	Bates	m/s^2		1/4-6 hr	50 km :: G	25 yr :: 1000-0.1 mb
1376	Acceleration, Diffusive_Zonal	Bates	m/s^2		1/4-6 hr	50 km :: G	25 yr :: 1000-0.1 mb
2083	Cloud Cover, Cirrus	Bates	dimensionless		1/20 min	50 km :: G	N/A :: High_Cloud
2085	Cloud Cover, Low-level	Bates	dimensionless		1/20 min	50 km :: G	N/A :: Low_Cloud
2084	Cloud Cover, Mid-level	Bates	dimensionless		1/20 min	50 km :: G	N/A :: Mid_Cloud
1396	Cloud Height, Base, Cirrus	Bates	mb		1/20 min	50 km :: G	N/A :: High_Cloud
1397	Cloud Height, Base, Low-level	Bates	mb		1/20 min	50 km :: G	N/A :: Low_Cloud
1398	Cloud Height, Base, Mid-level	Bates	mb		1/20 min	50 km :: G	N/A :: Mid_Cloud
1434	Cloud Height, Top, Cirrus	Bates	mb		1/20 min	50 km :: G	N/A :: High_Cloud
1435	Cloud Height, Top, Low-level	Bates	mb		1/20 min	50 km :: G	N/A :: Low_Cloud
1436	Cloud Height, Top, Mid-level	Bates	mb		1/20 min	50 km :: G	N/A :: Mid_Cloud
2468	Cloud Temperature, Top	Bates	K		1/20 min	50 km :: G	N/A :: Low_Cloud
2469	Cloud Temperature, Top	Bates	K		1/20 min	50 km :: G	N/A :: Mid_Cloud
2470	Cloud Temperature, Top	Bates	K		1/20 min	50 km :: G	N/A :: High_Cloud
1498	Geopotential Height	Bates	m		1/20 min	50 km :: G	50 vl :: 1000-0.1 mb
1540	Geopotential Height RMSE	Bates	m		1/20 min	100 km :: G	25 vl :: 1000-0.1 mb
1471	Heat Flux, Latent	Bates	W/m^2		1/20 min	50 km :: G	N/A :: Sfc
1483	Heat Flux, Sensible	Bates	W/m^2		1/20 min	50 km :: G	N/A :: Sfc
1441	Heating Rate, Convective	Bates	K/s		1/4-6 hr	50 km :: G	25 yr :: 1000-0.1 mb
1442	Heating Rate, Diffusive	Bates	K/s		1/4-6 hr	50 km :: G	25 yr :: 1000-0.1 mb
1452	Heating Rate, LW_Radiative	Bates	K/s		1/4-6 hr	50 km :: G	N/A :: 1000-0.1 mb
1879	Humidity Profile, Specific	Bates	g/kg		1/20 min	50 km :: G	50 yr :: 1000-0.1 mb
1884	Humidity, Specific, Near_sfc	Bates	g/kg		1/20 min	25 km :: G	N/A :: Near_sfc
1885	Humidity, Specific, Near_sfc	Bates	g/kg		1/20 min	50 km :: G	N/A :: Near_sfc
1982	Humidity-RMSE, Specific	Bates	g/kg		1/20 min	100 km :: G	25 yr :: 1000-0.1 mb
2499	Land_sfc Temperature, Skin	Bates	K		1/20 min	50 km :: Land	N/A :: Sfc
1924	Moistening, Convective	Bates	g/kg/s		1/4-6 hr	50 km :: G	25 yr :: 1000-0.1 mb
1925	Moistening, Diffusive	Bates	g/kg/s		1/4-6 hr	50 km :: G	25 yr :: 1000-0.1 mb
3096	Ocean Current Velocity, Meridional	Bates	cm/s			:: Ocean	200 m :: 0-4500 m
3097	Ocean Current Velocity, Zonal	Bates	cm/s			:: Ocean	200 m :: 0-4500 m
3078	Ocean Water Salinity	Bates	o/oo			:: Ocean	200 m :: 0-4500 m
3118	Ocean Water Temperature, Internal	Bates	K			50 km :: G	N/A :: Sfc
2843	Orography, Model	Bates	m			25 km :: G	N/A :: PBL
1638	PBL Thickness	Bates	m		1/20 min	50 km :: G	N/A :: PBL
1639	PBL Thickness	Bates	m		1/20 min	50 km :: G	N/A :: PBL

Appendix J: Output Data Products Listed by IDS Investigator

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol. :: Cover.	Vertical Resol. :: Cover.
1942	Precipitation Amount	Bates	mm		1/(4-6 hr)	50 km :: G	N/A :: Sfc
1948	Precipitation Amount, Convective	Bates	mm		1/(4-6 hr)	50 km :: G	N/A :: Sfc
1532	Pressure, Sfc	Bates	mb	1 :: 0.5	1/(20 min)	50 km :: G	N/A :: Sfc [Sea lvl]
1536	Pressure, Sfc	Bates	mb	1 :: 0.5	1/(20 min)	50 km :: G	N/A :: Sfc
1537	Pressure, Tropopause	Bates	mb		1/(20 min)	50 km :: G	N/A :: Tropopause
1541	Pressure-RMSE, Sfc	Bates	mb		1/(20 min)	100 km :: G	N/A :: Sfc
2166	Radiative Flux, LW, Down	Bates	W/m ²		1/(20 min)	50 km :: Land	N/A :: Sfc
2184	Radiative Flux, LW, Up	Bates	W/m ²		1/(20 min)	50 km :: Land	N/A :: TOA
2197	Radiative Flux, LW, Up	Bates	W/m ²		1/(20 min)	50 km :: Land	N/A :: Sfc
2219	Radiative Flux, SW, Down	Bates	W/m ²		1/(20 min)	50 km :: Land	N/A :: Sfc
2235	Radiative Flux, SW, Up	Bates	W/m ²		1/(20 min)	50 km :: Land	N/A :: TOA
2243	Radiative Flux, SW, Up	Bates	W/m ²		1/(20 min)	50 km :: Land	N/A :: Sfc
3109	Sea_Level Height	Bates	cm			50 km :: Ocean	N/A :: Sfc
3134	Sea_sfc State	Bates			1/hr	25 km :: Ocean	N/A :: Sfc
3035	Snow Depth	Bates	m		1/(20 min)	50 km :: Land	N/A :: Sfc
2972	Soil Moisture	Bates	g/cm ²		1/(20 min)	50 km :: Land	N/A ::
1626	Temperature Profile	Bates	K	0.8K :: TBD	1/(20 min)	50 km :: G	50 lyr :: 1000-0.1 mb
1617	Temperature, Dry bulb, Near_sfc	Bates	K		1/(20 min)	25 km :: G	N/A :: 10 m
1619	Temperature, Dry bulb, Near_sfc	Bates	K		1/(20 min)	50 km :: G	N/A :: 10 m
1620	Temperature, Dry bulb, Near_sfc	Bates	K		1/(20 min)	50 km :: G	N/A :: Near_sfc
1623	Temperature, Dry bulb, Near_sfc	Bates	K		1/(20 min)	50 km :: G	N/A :: Near_sfc
1618	Temperature, Dry bulb, PBL	Bates	K		1/(20 min)	50 km :: G	N/A :: PBL [top of]
1621	Temperature, Stratospheric	Bates	K		1/(20 min)	25 km :: G	N/A :: PBL [Top of]
1622	Temperature, Tropospheric	Bates	K		1/(20 min)	50 km :: G	N/A :: Tropopause
1542	Temperature-RMSE	Bates	K		1/(20 min)	100 km :: G	25 lyr :: 1000-0.1 mb
2954	Vegetation Moisture, Root-zone	Bates	g/cm ²		1/(20 min)	50 km :: Land	N/A ::
1692	Vertical Motion	Bates	mb/s		1/(20 min)	50 km :: G	50 lyr :: 1000-0.1 mb
1543	Wind Speed RMSE, Mean_Meridional	Bates	m/s		1/(20 min)	100 km :: G	25 lyr :: 1000-0.1 mb
1544	Wind Speed RMSE, Mean_Zonal	Bates	m/s		1/(20 min)	100 km :: G	25 lyr :: 1000-0.1 mb
1691	Wind Speed, Mean_Meridional	Bates	m/s		1/(20 min)	50 km :: G	50 lyr :: 1000-0.1 mb
1693	Wind Speed, Mean_Zonal	Bates	m/s		1/(20 min)	50 km :: G	50 lyr :: 1000-0.1 mb
1694	Wind Speed, Meridional	Bates	m/s		1/(20 min)	50 km :: G	N/A :: Near_sfc
1701	Wind Speed, Meridional	Bates	m/s		1/(20 min)	25 km :: G	N/A :: Near_sfc
1699	Wind Speed, Zonal	Bates	m/s		1/(20 min)	25 km :: G	N/A :: Near_sfc
1700	Wind Speed, Zonal	Bates	m/s		1/(20 min)	25 km :: G	N/A :: Sfc
1649	Wind Stress, Meridional	Bates	N/m ²		1/(20 min)	50 km :: G	N/A :: Near_sfc
1749	Wind Stress, Meridional	Bates	N/m ²		1/(20 min)	25 km :: G	N/A :: Near_sfc
1751	Wind Stress, Zonal	Bates	N/m ²		1/(20 min)	25 km :: G	N/A :: Sfc
1752	Wind Stress, Zonal	Bates	N/m ²		1/(20 min)	50 km :: G	N/A :: Sfc
1695	Wind Trajectories	Bates	dg (lat,lon),mb-pre		1/(20 min)	50 km :: G	50 lyr :: 1000-0.1 mb
1134	CO Flux	Brewer	mol-CO/m ² /s	30% :: 20%	1/day	20 km :: Ocean	N/A :: Sfc
1135	CO Flux	Brewer	mol-CO/m ² /s	30% :: 20%	1/day	30 m :: Ocean/L	N/A :: Sfc
1148	CO2 Flux	Brewer	mol-CO2/m ² /s		1/day	30 m :: Ocean/L	N/A :: TOO
1149	CO2 Flux	Brewer	mol-CO2/m ² /s		1/day	20 km :: Ocean	N/A :: TOO
1153	COF2 Conc	Brewer	mix ratio	30% :: 20%	1/day	:: L	:: PBL

Appendix J: Output Data Products Listed by IDS Investigator

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
1154	COS Conc	Brewer	mix ratio	30% :: 20%	1/day	:: G	:: PBL
1156	CS2 Conc	Brewer	mix ratio	30% :: 20%	1/day	:: G	:: PBL
1157	CS2 Conc	Brewer	mix ratio	30% :: 20%	1/day	:: L	:: PBL
1159	DMS Conc	Brewer	mix ratio	30% :: 20%	1/day	:: L	:: PBL
1160	DMS Conc	Brewer	mix ratio	30% :: 20%	1/day	:: G	:: PBL
1161	DMS Flux	Brewer	mol/m ² /s	30% :: 20%	1/day	20 km :: Ocean	N/A :: Sfc
1162	DMS Flux	Brewer	mol/m ² /s	30% :: 20%	1/day	30 m :: Ocean/L	N/A :: Sfc
1173	H2S Conc	Brewer	mix ratio	30% :: 20%	1/day	:: L	:: PBL
1174	H2S Conc	Brewer	mix ratio	30% :: 20%	1/day	:: G	:: PBL
3073	Oil_Slick Cover	Brewer	% surface		1/day	20 km :: Ocean	N/A :: TOO
3074	Oil_Slick Cover	Brewer	% surface		1/day	30 m :: Ocean/L	N/A :: TOO
2595	Phytoplankton Type	Brewer	%		1/day	30 m :: Ocean/L	N/A :: TOO
2596	Phytoplankton Type	Brewer	%		1/day	20 km :: Ocean	N/A :: TOO
1367	SO2 Conc	Brewer	mix ratio	30% :: 20%	1/day	:: L	:: PBL
1368	SO2 Conc	Brewer	mix ratio	30% :: 20%	1/day	:: G	:: PBL
3088	Trace Gas Transfer Coef	Brewer	m/s		1/day, 1/seas	25 km :: Ocean/G.L	N/A :: TOO
2547	C Budget, Global	Cihlar	kg/ha/yr	:: 0.1	1/yr	1 km :: Land/R	N/A :: Sfc
2713	Vegetation Change	Cihlar	veg change classes	1 class	1/yr	1 km :: Land/R	N/A :: Sfc
2661	Vegetation Growing Season Duration	Cihlar	day	10 dy :: 1dy	1/yr	1 km :: Land/R	N/A :: Sfc
2706	Vegetation Index	Cihlar	various indices	.05 :: 0.001	1/(10 day)	1 km :: Land/R	N/A :: Sfc
2694	Vegetation Phytomass	Cihlar	kg/ha	:: 10%	1/yr	1 km :: Land/R	N/A :: Sfc
2727	Vegetation Succession	Cihlar	vegetation change	:: 1 class	1/(2 yr)	1 km :: Land/R	N/A :: Sfc
2737	Vegetation Type	Cihlar	classes	[1 km] :: 1 class	1/yr	1 km :: Land/R	N/A :: Sfc
3525	Albedo, Cloud	Dickinson				0.5-1 dg :: G	
3521	Cloud Cover	Dickinson				0.5-1 dg :: G	
3528	Cloud Drop Size	Dickinson				0.5-1 dg :: G	
3527	Cloud Liq Water Content	Dickinson				0.5-1 dg :: G	
3526	Cloud Optical Depth	Dickinson				0.5-1 dg :: G	
3524	Cloud Phase	Dickinson				0.5-1 dg :: G	
3523	Cloud Pressure	Dickinson				0.5-1 dg :: G	
3522	Cloud Temperature, Top	Dickinson			1/mo	1 x 1 dg ::	
3537	Energy Flux, Net	Dickinson			1/mo	1 x 1 dg ::	
3531	Heat Flux, Latent	Dickinson			1/mo	1 x 1 dg ::	
3530	Heat Flux, Sensible	Dickinson			1/mo	1 x 1 dg ::	
3534	Heat Transport	Dickinson			1/mo	1 x 1 dg ::	
3535	Moisture Transport	Dickinson			1/mo	1 x 1 dg ::	
3536	Momentum Transport	Dickinson			1/mo	1 x 1 dg ::	
3533	Radiative Flux, LW	Dickinson			1/mo	1 x 1 dg ::	
3532	Radiative Flux, Solar	Dickinson			1/mo	1 x 1 dg ::	
3529	Vegetation Reflectance, Bi-directional, (BRDF)	Dickinson					
2811	Land Geochemical Analysis	Dozier	N/A		1/day	50 m :: L	
2553	Land_sfc Biochemical Analysis	Dozier	N/A		1/day	50 m :: L	
2989	Runoff	Dozier	m ³ /km ² /s	50% :: 50%	1/day	50 m :: L	
3070	Runoff Chemistry	Dozier	eq/m ² /s	100% :: 100%	1/day	50 m :: L	
3002	Snow Chemistry	Dozier	m-eq/m ²	50% :: 50%	1/wk, 1/mo	50 m :: Snow/L	

Appendix J: Output Data Products Listed by IDS Investigator

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol. :: Cover.	Vertical Resol. :: Cover.
3041	Snow Melt Area, Distributed	Dozier	mm/hr	50 :: 50	1/day	50 m :: L	
3042	Snow Melt Chemistry	Dozier	m-eg/m ²	100% :: 100%	1/wk, 1/mo	50 m :: L	
1068	CH3Cl Conc	Grose	mix ratio		1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
1090	CH4 Budget	Grose			1/mo	-6 x 6 dg :: G	
1080	CH4 Conc	Grose	mix ratio		1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
1371	Chemistry Diagnostics, Seasonal	Grose			1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
1112	ClOy Conc	Grose	mix ratio		1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
1113	ClOy Conc	Grose	mix ratio		1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
1114	ClOy Conc	Grose	mix ratio		1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
1832	H2O Conc	Grose	mix ratio		48/day [for 10 day]	-6 x 6 dg :: G	24 hI :: 0-90 km
1185	HCl Conc	Grose	mix ratio		48/day [for 10 day]	-6 x 6 dg :: G	24 hI :: 0-90 km
1224	HOy Conc	Grose			1/secs	-6 x 6 dg :: G	
1225	HOy Conc	Grose	mix ratio		1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
1226	HOy Conc	Grose	mix ratio		1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
1845	Moisture Budget	Grose	mix ratio		48/day [for 10 day]	-6 x 6 dg :: G	24 hI :: 0-90 km
1244	N2O Budget	Grose			1/mo	-6 x 6 dg :: G	
1234	N2O Conc	Grose	mix ratio		1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
1235	N2O Conc	Grose	mix ratio		1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
1291	NOy Budget	Grose			1/mo	-6 x 6 dg :: G	
1287	NOy Conc	Grose			1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
1288	NOy Conc	Grose	mix ratio		1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
1289	NOy Conc	Grose	mix ratio		48/day [for 10 day]	-6 x 6 dg :: G	24 hI :: 0-90 km
1292	NOy Conc	Grose	mix ratio		1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
1330	O3 Budget	Grose			1/mo	-6 x 6 dg :: G	
1361	Ox Conc	Grose	mix ratio		1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
1362	Ox Conc	Grose			1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
1363	Ox Conc	Grose	mix ratio		48/day [for 10 day]	-6 x 6 dg :: G	24 hI :: 0-90 km
1515	Planetary Wave Structure	Grose			1/day	-6 x 6 dg :: G	24 hI :: 0-90 km
1595	Temperature Profile	Grose	K		1/day	-6 x 6 dg :: G	24 hI :: 0-90 km
1596	Temperature Profile	Grose	K		48/day [for 10 day]	-6 x 6 dg :: G	24 hI :: 0-90 km
1597	Temperature Profile	Grose	K		1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
1375	Trace Gas Conc, Non-diurnally-varying	Grose	mix ratio		1/day	-6 x 6 dg :: G	24 hI :: 0-90 km
1755	Trace Gas Transport Diagnostics	Grose			1/day	-6 x 6 dg :: G	24 hI :: 0-90 km
1645	Vorticity, Potential	Grose			1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
1676	Wind Velocity	Grose	m/s, dg		1/day	-6 x 6 dg :: G	1 hI :: 0-30 km
1677	Wind Velocity	Grose	m/s, dg		48/day	-6 x 6 dg :: G	[24 hI] :: 0-90 km
2548	C Flux, Global	Hansen	g C/m ² /s		1/mo	-6 x 6 dg :: G	24 hI :: 0-90 km
2554	C-Cycle Diagnostic Data	Hansen			1/wk	500 km ::	
2545	Climatology Diagnostic Data	Hansen			1/wk	500 km :: G	:: Trop
2422	Cloud Radiative Forcing	Hansen	W/m ²		1/wk	500 km :: G	:: Atmos
2135	Heat Flux, Feedback,	Hansen	W/m ²		1/wk	500 km :: G	:: Atmos
3571	C Flux	Harris			1/wk	500 km :: G	:: Atmos
3570	Fish-stock Abundance	Harris			secs, yr	:: Ocean	
3565	Ocean Color/Temperature Maps, Composite	Harris				:: Ocean / R(Australia-STC)	
3569	Ocean Productivity Variability	Harris			secs, yr	:: Ocean / R(Australia-STC)	

Appendix J: Output Data Products Listed by IDS Investigator

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol. :: Cover.	Vertical Resol. :: Cover.
3566	Phytoplankton Biomass	Harris				:: Ocean / R(Australia-STC)	
3567	Phytoplankton Species Composition	Harris				:: Ocean / R(Australia-STC)	
3568	Temperature, Dry bulb, Tropopause	Harris				:: Ocean / R(Australia-STC)	
1891	Cloud Ice Content	Hartmann	kg/m ²	0.02 :: 0.02	1/day	10 km :: G	Column :: Trop
1923	Cloud Liq. water Total Column	Hartmann	kg/m ²	0.05 :: 0.05	1/day	10 km :: G	
1411	Cloud Structure, Mesoscale	Hartmann	W/m ²	10 :: 10	1/day	100 km :: Ocean	Sfc ::
1472	Heat Flux, Latent	Hartmann	mm/day	10 :: 10	1/day	10 km :: Ocean	
1945	Precipitation Amount	Hartmann				:: Land/R(Andes)	
3588	Crustal Motion	Isacks				:: Land/R(Andes)	
3584	Dust Composition	Isacks				:: Land/R(Andes)	
3580	Dust Conc	Isacks				:: Land/R(Andes)	
3583	Dust Size	Isacks				:: Land/R(Andes)	
3582	Dust Source	Isacks				:: Land/R(Andes)	
3581	Dust Spatial Distribution	Isacks				:: Land/R(Andes)	
3589	Erosion-Deposition Events	Isacks				:: Land/R(Andes)	
3590	Landform Face Freshness	Isacks				:: Land/R(Andes)	
3591	Landform Stratigraphy	Isacks				:: Land/R(Andes)	
3592	Landform Structures(Relief/Lithology Change)	Isacks				:: Land/R(Andes)	
3587	Land_sfc Roughness	Isacks				:: Land/R(Andes)	
3577	Land_sfc Temperature, Average	Isacks				:: Land/R(Andes)	
3578	Land_sfc Temperature-Variability(&Extrema)	Isacks				:: Land/R(Andes)	
3572	Precipitation Amount, Average	Isacks				:: Land/R(Andes)	
3573	Precipitation Variability(&Extrema)	Isacks				:: Land/R(Andes)	
3576	Sediment Conc	Isacks				:: Land/R(Andes)	
3574	Snow&Ice Content	Isacks				:: Land/R(Andes)	
3575	Surface Water Content (Soil Moisture+Lakes+Rivers)	Isacks				:: Land/R(Andes)	
3586	Vegetation Class(Type)	Isacks				:: Land/R(Andes)	
3585	Vegetation Density	Isacks				:: Land/R(Andes)	
3579	Wind Velocity, Prevailing	Isacks				:: Land/R(Andes)	
2886	Drainage_Basin Boundary	Isacks				:: Land/R(Andes)	
2136	Heat Flux, Horizontal	Kerr, Sorooshian	km ²	10000 [?] ::	1/mission	30 m :: Land/R	:: Sfc
1473	Heat Flux, Latent	Kerr, Sorooshian	W/m ² hum			10 km :: Land/R	:: Trop
1484	Heat Flux, Sensible	Kerr, Sorooshian	W/m ²	10% :: 10%	1/day	500 m :: Land	N/A :: Sfc
1485	Heat Flux, Sensible	Kerr, Sorooshian	W/m ²	10% :: 10%	1/hr	500 km :: Land/R	N/A :: Sfc
2270	Irradiance, Total	Kerr, Sorooshian	W/m ²	10% :: 10%	1/hr	500 m :: Land/R	N/A :: Sfc
2331	PAR	Kerr, Sorooshian	W/m ²	50 :: 25		500 m :: Land/R	N/A :: Sfc
2138	Radiative Flux, Net	Kerr, Sorooshian	W/m ²	100 :: 100	1/day	500 m :: Land/R	N/A :: Sfc
3030	River Channel Geometry, Major-stream	Kerr, Sorooshian	W/m ²	15% :: 15%	[diurnal]	1 km :: Land/R	N/A :: Sfc
2901	Runoff_Contributing-area	Kerr, Sorooshian	m ²	10 :: 10	1/seas	30 m :: Land/R	:: Sfc
2991	Runoff_Contributing-area	Kerr, Sorooshian	km ²	5 :: 5	1/mission	500 m :: Land/R	N/A :: Sfc
2048	Soil Brightness Index	Kerr, Sorooshian	%	5 :: 5	1/mission	500 m :: Land/R	
2793	Soil Class	Kerr, Sorooshian	class	5% :: 10%	1/(2 mo)	30 m :: Land/R	
2973	Soil Moisture	Kerr, Sorooshian	% vol	25% :: 15%	1/yr	30 m :: Land/R	:: Sfc
2789	Soil Proportion, Bare	Kerr, Sorooshian	%	10% :: 10%	1/day	500 m :: Land/R	N/A :: Sfc
2503	Soil Temperature	Kerr, Sorooshian	K	0.5 K :: 0.5	1/wk	500 m :: Land	
					2/day [d,n]	500 m :: Land/R	:: Sfc

Appendix J: Output Data Products Listed by IDS Investigator

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
2609	Vegetation Biomass, Above_sfc	Kerr, Sorooshian	kg/m^2	20% ::	1/secs	60 m :: Land/R	:: Sfc
2714	Vegetation Condition	Kerr, Sorooshian	N/A	10% :: 10%	1/wk	500 m :: Land/R	N/A :: Sfc
2752	Vegetation Index	Kerr, Sorooshian	%	.01 :: .01	1/(2 wk)	30 m :: Land/R	:: Sfc
2682	Vegetation Index, Leaf Area, (LAI)	Kerr, Sorooshian	%	10% :: 5%	1/mo	30 m :: Land/R	:: Sfc
2621	Vegetation Litter Biomass	Kerr, Sorooshian	kg/km^2			30 m :: Land/R	:: Sfc
2699	Vegetation Production, Net Primary, (NPP)	Kerr, Sorooshian	1/yr	20% :: 10%	1/yr	500 m :: Land	N/A :: Sfc
2704	Vegetation Productivity	Kerr, Sorooshian	annual %			30 m :: Land/R	:: Sfc
3065	Vegetation Stress Index, Water	Kerr, Sorooshian	%change	5% :: 5%	1/(2 mo)	500 m :: Land/R	
3507	Evaporation, Land_sfc	Lau				:: G	N/A :: Sfc
3511	Heating, Latent	Lau					:: Atmos
3513	Moisture Budget	Lau				:: R	:: Upper_atmos
3512	Moisture Transport Statistics	Lau				:: G	:: Atmos
3506	Precipitable Water	Lau				:: G	N/A :: Sfc
3505	Precipitation Amount, Rain	Lau			1/mo	:: Land/R (Andes)	N/A :: Sfc
3514	Precipitation Sampling statistics, Rain	Lau					N/A :: Sfc
3515	Radiative Flux Divergence, Clear-sky	Lau					
3516	Radiative Flux Divergence, Cloudy-sky	Lau					
3508	Soil Moisture	Lau				:: G	N/A :: Sfc
3509	Vegetation Evapotrans	Lau				:: G	N/A :: Sfc
3510	Vegetation Index	Lau				:: G	N/A :: Sfc
3593	Level-2 Data Comparisons, EOS_Instrument	Le Marshall				:: R (Tropics, So Hemis)	
3517	Heat Flux, Latent	Liu			3 day	1 x 1 dg :: Ocean	N/A :: Sfc
3518	Heat Flux, Sensible	Liu			3 day	1 x 1 dg :: Ocean	N/A :: Sfc
3519	Ocean Circulation, Model Eddy-Resolving	Liu			3 day	1/3 dg :: Ocean	30 level ::
3520	Sea Level Height	Liu			10 day	1/3 dg :: Ocean	N/A :: Sfc
1091	CH4 Emission	Moore	g/ha/timestep	30%? :: 5-10%?	1/mo	1 km :: Land	:: Sfc
1092	CH4 Emission	Moore	g/ha/timestep	30%? :: 5-10%?	1/mo	.030-1 km :: Land/R,L	:: Sfc
1143	CO2 Exchange	Moore	various			Mult :: Land/R	
1144	CO2 Exchange	Moore	various			Mult :: Land	
2633	Fire Burning Index	Moore	ha		1/yr	1 km :: Land	
3069	Hydrological Parameter, XXX	Moore	% saturation		1/wk	1 km :: Land	
2937	Inundation Depth	Moore	m		1/wk	1 km :: Land	
2941	Inundation Extent	Moore	ha/km^2		1/wk	1 km :: Land	
1245	N2O Emission	Moore	g/ha/mo	30% :: 5-10%	1/mo, 1/yr	.030-1 km :: Land/R	
1246	N2O Emission	Moore	g/ha/mo	30% :: 5-10%	1/mo, 1/yr	1 km :: Land	
2332	PAR	Moore	W/m^2	100 :: 100	1/day	.030-1 km :: Land/R,L	
2333	PAR	Moore	W/m^2	100 :: 100	1/day	1 km :: Land	
2893	River Discharge	Moore	m^3/s		1/wk	1 km :: Land	
2990	Runoff	Moore	mm-H2O/wk		1/wk	1 km :: Land	
2769	Sediment(C) Constituent Flux	Moore	kg/wk/TBD-area		1/wk	1 km :: Sel_basins	N/A :: Sfc
2775	Sediment(N) Constituent Flux	Moore	kg/wk/TBD-area		1/wk	1 km :: Sel_basins	N/A :: Sfc
2777	Sediment(P) Constituent Flux	Moore	kg/wk/TBD-area		1/wk	1 km :: Sel_basins	N/A :: Sfc
2974	Soil Moisture	Moore	kg/m^2	20% :: 20%	1/(1-2 wk)	.030-1 km :: Land/R,L	
2975	Soil Moisture	Moore	kg/m^2	20% :: 20%	1/(1-2 wk)	1 km :: Land	
2549	Soil N Turnover	Moore	kg/ha per t-step	30% :: 1%	1/mo, 1/yr	Mult :: Land/R,L	

Appendix J: Output Data Products Listed by IDS Investigator

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
2550	Soil N Turnover	Moore	kg/ha per t-step	30% :: 1%	1/mo, 1/yr	Mult :: Land	
2705	Soil Proportion, Bare	Moore	%	10% :: 10%	1/mo	1 km :: Land	
2610	Vegetation Biomass, Above_sfc	Moore	kg/ha		1/(1-3 yrs) [few yrs]	.030-1 km :: Land/R	
2611	Vegetation Biomass, Above_sfc	Moore	kg/ha		1/(1-3 yr) [few yr]	.030-1 km :: Land	
2625	Vegetation Biomass, Sub_sfc	Moore	kg/ha		1/(1-3 yr) [few yr]	:: Land/R	
2626	Vegetation Biomass, Sub_sfc	Moore	kg/ha		1/(1-3 yr) [few yr]	:: Land	
1797	Vegetation Evapotrans	Moore	mm/day	1 :: 1	1/day, 1/wk	.030-1 km :: Land/R,L	
1798	Vegetation Evapotrans	Moore	mm/day	1 :: 1	1/day, 1/wk	1 km :: Land	
2635	Vegetation Extent	Moore	ha	15% :: 15%	1/yr	1 km :: Land	
2753	Vegetation Index	Moore	dimensionless		1/mo, 1/yr	.030-1 km :: Land/R,L	
2754	Vegetation Index	Moore	dimensionless		1/mo, 1/yr	1 km :: Land	
2683	Vegetation Index, Leaf Area, (LAI)	Moore	%	10 :: 5	1/(1-3 mo) [few mo]	30 m :: Land/L,R	
2622	Vegetation Litter Biomass	Moore	kg/ha		1/(1-3 yr) [few yr]	:: Land/R,L	
2623	Vegetation Litter Biomass	Moore	kg/ha		1/(1-3 yr) [few yr]	:: Land	
2697	Vegetation Production, Net Ecosystem, (NEP)	Moore	g/yr/km^2	25% :: 10%	1/yr	km (?) :: Land	
2700	Vegetation Production, Net Primary, (NPP)	Moore	g/yr/km^2	25% :: 10%	1/yr	1 km :: Land	
2725	Vegetation Stress Index, XXX	Moore			1/mo	30 m :: Land/R,L	
2738	Vegetation Type	Moore	classes		1/(3 yr)	1 km :: Land	
3265	Aerosol Dispersion, Eruption_Pume	Mouginis-Mark	kg-sulfate/day		1/event	1 km :: G	:: Plume, col
3267	Eruption-Pume Dispersion	Mouginis-Mark	km/day		1/event	1 km :: R	N/A :: Sfc
3281	Eruption_Pume SO2 Eruption Rate, Mass	Mouginis-Mark	kg/day		1/day, 1/wk	1 km :: G	N/A :: Sfc
3268	Lava-Flow Cooling Rate	Mouginis-Mark	C/day	5 C/day ::	1/event	30 m :: Land/L	N/A :: Sfc
3280	Lava-Flow Eruption Rate, Mass,	Mouginis-Mark	kg/day	10^5 kg ::	1/day, 1/wk	30 m :: Land/L	N/A :: Sfc
3272	Volcano Cone Deformation	Mouginis-Mark	cm/mo	1 cm (ver) ::	(-10)/event	30 m :: Land/L	cm :: Sfc
3275	Volcano Elevation	Mouginis-Mark	cm	10 m (ver) ::	1/mission	30 m :: Land/L	N/A :: Sfc
3277	Volcano Elevation, Reference	Mouginis-Mark	cm	10 m (ver) ::	1/mission	30 m :: Land/L	N/A :: Sfc
3279	Volcano Emissions, Eruption	Mouginis-Mark	SO2 rise in kton		1/yr	20 km :: G	N/A :: Plume, top
3296	Volcano Temperature-Change	Mouginis-Mark	C/yr	1 C ::	1/yr	30 m :: Land/L	N/A :: Sfc
3300	Volcano Volume-Change	Mouginis-Mark	m^3	1000 m^3 ::	1/event	30 m :: Land/L	N/A :: Sfc
3563	Heat Flux, Latent	Murakami				:: Ocean/R(-Pacific)	
3556	O3 Conc	Murakami				5 dg :: G	2 km :: Atmos
3559	Precipitable Water	Murakami				:: Ocean/R(-Pacific)	
3558	Precipitation Amount	Murakami				:: Ocean/R(-Pacific)	
3561	Sea_Level Height	Murakami				:: Ocean/R(-Pacific)	
3564	Sea_sfc Temperature (SST)	Murakami				:: Ocean/R(-Pacific)	
3557	Trace Gas Total Burden, Greenhouse	Murakami				5 dg :: G	NA :: Atmos
3562	Wind Velocity, Sea_sfc	Murakami				:: Ocean/R(-Pacific)	
3560	Wind Velocity, Tropospheric 3-D	Murakami				:: Ocean/R(-Pacific)	
1033	BrOy Conc	Pyle					
1181	CFC-XXX (HCFC3) Conc	Pyle					
1058	CFC-XXX Conc	Pyle					
1081	CH4 Conc	Pyle					
1115	ClOy Conc	Pyle					
1833	H2O Conc	Pyle					
1175	Halons Conc	Pyle					

Appendix J: Output Data Products Listed by IDS Investigator

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol. :: Cover.	Vertical Resol. :: Cover.
1227	HOy Conc	Pyle					
1236	N2O Conc	Pyle					
1290	NOy Conc	Pyle					
1364	Ox Conc	Pyle					
1598	Temperature Profile	Pyle					
1646	Vorticity, Potential	Pyle					
1683	Wind Velocity, 3-D	Pyle					
1093	CH4 Flux	Richey, Batista	g/ha/day	20% :: 20%	1/day	1 km :: Land/R	:: Sfc
1094	CH4 Flux	Richey, Batista	g/ha/day	20% :: 20%	1/day	1 km :: Land/R	
1147	CO2 Flux	Richey, Batista	kg/ha/hr	20% :: 20%	1/day	1 km :: Land/R	:: Sfc
1155	COS Flux	Richey, Batista	kg/ha/hr	20% :: 20%	1/day	1 km :: Land/R	
2710	Ground Water Sun Routing	Richey, Batista	g/ha/day	20% :: 20%	1/mo	1 km :: Land/R	
1943	Precipitation Amount	Richey, Batista	mm/mo	10% :: 10%	1/wk	1 km :: Land/R	:: Sfc
1944	Precipitation Amount	Richey, Batista	mm/mo	10% :: 10%	1/wk	1 km :: Land/R	
2987	Runoff	Richey, Batista	mm/mo	10% :: 10%	1/wk	1 km :: Land/R	
2988	Runoff	Richey, Batista	mm/mo	10% :: 10%	1/wk	1 km :: Land/R	
1795	Vegetation Evapotrans	Richey, Batista	mm/mo	5% :: 5%	1/wk	1 km :: Land/R	:: Sfc
1796	Vegetation Evapotrans	Richey, Batista	mm/mo	5% :: 5%	1/wk	1 km :: Land/R	
1474	Heat Flux, Latent	Rothrock	W/m^2	5% :: 5%	1/mo	1 km :: Land/R	:: Sfc
1486	Heat Flux, Sensible	Rothrock	W/m^2	5% :: 5%	1/mo	1 km :: Land/R	
2607	Ocean Productivity, Primary	Rothrock	g-C/m^2/day	20% :: 20%	1/(3 day)	100 km :: > 60 dg/LAT	
3198	Ocean Water Attenuation Coef, Diffuse	Rothrock	W/m^2	20% :: 20%	1/day, 1/wk	100 km :: > 60 dg/LAT	:: TOO
3082	Ocean Water Salinity	Rothrock	/m	10% :: 10%	1/(3 day)	100 km :: > 60 dg/LAT	:: TOO
3084	Ocean Water Salt Flux	Rothrock	g/m^2/day	20% :: 20%	1/(3 day)	100 km :: > 60 dg/LAT	
3119	Ocean Water Temperature, Internal	Rothrock	K	20% :: 20%	1/day	100 km :: > 60 dg/LAT	:: TOO
3076	Pigment Conc	Rothrock	mg/m^3		1/(3 day)	100 km :: > 60 dg/LAT	W :: TOO
1523	Pressure, Sfc	Rothrock	mb		1/(3 day)	100 km :: > 60 dg/LAT	N/A :: Sfc
2406	Radiance, Total	Rothrock	m W/m^2		1/(3 day)	100 km :: > 60 dg/LAT	
2178	Radiative Flux, LW, Net	Rothrock	W/m^2	10% :: 10%	1/day	100 km :: > 60 dg/LAT	
2227	Radiative Flux, SW, Net	Rothrock	W/m^2	15% :: 15%	1/day, 1/wk	100 km :: > 60 dg/LAT	
3194	Sea_Ice Extent	Rothrock	fraction	0.05 :: 0.05	1/(3 day)	100 km :: > 60 dg/LAT	:: Sfc
3187	Sea_Ice Max Extent	Rothrock	fraction		1/(3 day)	100 km :: > 60 dg/LAT	:: Sfc
3132	Wind Velocity	Rothrock	cm/s, dg		1/(3 day)	100 km :: > 60 dg/LAT	:: Trop
1686	Wind Velocity, Geostrophic	Rothrock	m/s		1/(3 day)	100 km :: > 60 dg/LAT	
1678	Wind Velocity, Sea_sfc	Rothrock	m/s, dg		1/(3 day)	100 km :: > 60 dg/LAT	
2002	Albedo, Land_sfc	Schimel	%	10% :: 1%	1/day, 1/wk	[multiple] :: 6 sites/L	
2887	Bowen Ratio	Schimel	ratio	20% :: 1%	1/day	500 m :: 6 sites/L	:: Sfc
1098	CH4 Uptake	Schimel	g/ha/mo	30% :: 5%	1/secs	[multiple] :: 6 sites/L	:: Sfc
1099	CH4 Uptake	Schimel	g/ha/mo	30% :: 1%	1/secs	30 m :: 6 sites/L	:: Sfc
1100	CH4 Uptake Time-derivative	Schimel	g/ha/mo^2	30% :: 1%	1/secs	[multiple] :: 6 sites/L	:: Sfc
1145	CO2 Exchange	Schimel	g/ha/hr	25% :: 1%	1/day	Mult :: 6 sites/L	:: Sfc
1146	CO2 Exchange Time-deriv	Schimel	g/ha/hr^2	25% :: 1%	1/day	Mult :: 6 sites/L	:: Sfc
1247	N2O Emission	Schimel	g/ha/mo	25% :: 1%	1/secs	[multiple] :: 6 sites/L	:: Sfc
1248	N2O Emission Time-deriv	Schimel	g/ha/mo^2	50% :: 1%	1/secs	[multiple] :: 6 sites/L	:: Sfc
1257	NH4 Exchange	Schimel	g/ha/mo	25% :: 1%	1/secs	[multiple] :: 6 sites/L	:: Sfc

Appendix J: Output Data Products Listed by IDS Investigator

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol. :: Cover.	Vertical Resol. :: Cover.
1258	NH4 Exchange Time-deriv	Schimel	g/ha/mo ²	25% :: 1%	1/secs	[multiple] :: 6 sites/L	:: Sfc
1259	NMHC Flux	Schimel	g/ha/mo	50% :: 5%	1/secs	[multiple] :: 6 sites/L	:: Sfc
1260	NMHC Flux	Schimel	g/ha/mo	50% :: 1%	1/secs	30 m :: 6 sites/L	:: Sfc
1261	NMHC Flux Time-deriv	Schimel	g/ha/mo ²	50% :: 1%	1/secs	30 m :: 6 sites/L	:: Sfc
1284	NOx Emission	Schimel	g/ha/mo	25% :: 1%	1/secs	30 m :: 6 sites/L	:: Sfc
1285	NOx Emission	Schimel	g/ha/mo	25% :: 5%	1/secs	[multiple] :: 6 sites/L	:: Sfc
1286	NOx Emission Time-deriv	Schimel	g/ha/mo ²	25% :: 1%	1/secs	30 m :: 6 sites/L	:: Sfc
2976	Soil Moisture	Schimel	cm	25% :: 5%	1/wk	30 m :: 6 sites/L	:: Sfc
2551	Soil N Turnover	Schimel	kg/ha	25% :: 1%	1/secs	Mult :: 6 sites/L	:: Sfc
2552	Soil N Turnover Time-deriv	Schimel	kg/ha	25% :: 1%	1/secs	500 m :: 6 sites/L	:: Sfc
2790	Soil Proportion, Bare	Schimel	%	15% :: 5%	1/day	[multiple] :: 6 sites/L	:: Sfc
1799	Vegetation Evapotrans	Schimel	cm/day	20% :: 1%	1/day	[multiple] :: 6 sites/L	:: Sfc
1803	Vegetation Evapotrans Time-deriv, Annual	Schimel	cm ³	20% :: 5%	1/yr	500 m :: 6 sites/L	:: Sfc
2637	Vegetation Height	Schimel	m	20% :: 1%	1/secs	[multiple] :: 6 sites/L	:: Sfc
2702	Vegetation Production Time-deriv, Net Primary, (dNPP/dt)	Schimel	kg/ha ³	20% :: 1%	1/secs	[multiple] :: 6 sites/L	:: Sfc
2701	Vegetation Production, Net Primary, (NPP)	Schimel	kg/ha	20% :: 1%	1/secs	10 dgZM :: G	2 km :: 0-90 km
1025	Br Conc	Schoeberl	ppt	20% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1029	BrO Conc	Schoeberl	ppt	20% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1032	BrONO2 Conc	Schoeberl	ppt	20% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1038	CBrlF2 Conc	Schoeberl	ppt	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1039	CCl4 Conc	Schoeberl	ppt	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1041	CCl4 Conc	Schoeberl	ppb	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1053	CFC-11(CFC13) Conc	Schoeberl	ppb	15% ::	(1-4)/day	2 x 3 dg :: G	2 km :: Atmos
1054	CFC-11(CFC13) Conc	Schoeberl	ppb	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1035	CFC-113(C2Cl3F3) Conc	Schoeberl	ppb	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1034	CFC-114(C2Cl2F4) Conc	Schoeberl	ppb	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1036	CFC-115(C2ClF5) Conc	Schoeberl	ppb	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1045	CFC-12(CF2Cl2) Conc	Schoeberl	ppb	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1046	CFC-12(CF2Cl2) Conc	Schoeberl	ppb	15% ::	(1-4)/day	2 x 3 dg :: G	2 km :: Atmos
1056	CFC10 Conc	Schoeberl	ppb	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1060	CH3 Conc	Schoeberl	ppb	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1063	CH3Br Conc	Schoeberl	ppt	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1064	CH3CCl3 Conc	Schoeberl	ppb	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1069	CH3Cl Conc	Schoeberl	ppb	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1071	CH3O Conc	Schoeberl	ppb	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1072	CH3O2 Conc	Schoeberl	ppb	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1073	CH3OOH Conc	Schoeberl	ppb	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1082	CH4 Conc	Schoeberl	ppm	15% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1083	CH4 Conc	Schoeberl	ppm	10% :: 10%	1/3 mo	6 regions :: R	1 km :: 0-15 km
1084	CH4 Conc	Schoeberl	ppm	15% ::	(1-4)/day	2 x 3 dg :: G	2 km :: Atmos
1101	CHO Conc	Schoeberl	ppb	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1102	Cl Conc	Schoeberl	ppb	20% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1106	ClO Conc	Schoeberl	ppb	20% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1111	ClONO2 Conc	Schoeberl	ppb	20% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1123	CO Conc	Schoeberl	ppb	20% ::	1/3 mo	6 regions :: R	1 km :: 0-15 km

Appendix J: Output Data Products Listed by IDS Investigator

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol. :: Cover.	Vertical Resol. :: Cover.
1152	COF2 Conc	Schoeberl	ppb	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1163	H Conc	Schoeberl	ppb	30% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1164	H2 Conc	Schoeberl	ppm	15% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1059	H2CO Conc	Schoeberl	ppb	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1834	H2O Conc	Schoeberl	ppm	30% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1835	H2O Conc	Schoeberl	ppm	15% :: 10%	(1-4)/day	2 x 3 dg :: G	2 km :: Atmos
1169	H2O2 Conc	Schoeberl	ppb	30% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1170	H2O2 Conc	Schoeberl	ppb	30% ::	1/(3 mo)	6 regions :: R	1 km :: 0-15 km
1179	HBr Conc	Schoeberl	ppt	20% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1186	HCl Conc	Schoeberl	ppb	20% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1196	HF Conc	Schoeberl	ppb	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1201	HNO3 Conc	Schoeberl	ppm	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1209	HNO4 Conc	Schoeberl	ppm	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1215	HO2 Conc	Schoeberl	ppb	30% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1221	HOCl Conc	Schoeberl	ppb	20% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1228	N Conc	Schoeberl	ppm	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1237	N2O Conc	Schoeberl	ppb	15% ::	(1-4)/day	2 x 3 dg :: G	2 km :: Atmos
1238	N2O Conc	Schoeberl	ppb	25% :: 10%	1/mo	10 dgZM :: G	2 km :: 0-90 km
1253	N2O3 Conc	Schoeberl	ppm	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1265	NO Conc	Schoeberl	ppm	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1272	NO2 Conc	Schoeberl	ppm	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1281	NO3 Conc	Schoeberl	ppm	25% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1283	NOx Conc	Schoeberl	ppt	30% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1293	O(1D) Conc	Schoeberl	ppm	20% ::	1/(3 mo)	6 regions :: R	1 km :: 0-15 km
1297	O(3P) Conc	Schoeberl	ppm	20% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1315	O3 Conc	Schoeberl	ppm	20% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
1316	O3 Conc	Schoeberl	ppm	10% :: 10%	(1-4)/day	2 x 3 dg :: G	2 km :: Atmos
1317	O3 Conc	Schoeberl	ppb	20% ::	1/(3 mo)	6 regions :: R	1 km :: 0-15 km
1346	O3 Conc, SBUV-2, Corrected	Schoeberl	ppm	0.5 :: 0.2	1/day	8 x 10 dg :: G	5 km :: Atmos
1347	O3 Conc, SBUV-2, Follow-on	Schoeberl	ppm	0.5 :: 0.2	1/day	8 x 10 dg :: G	5 km :: Atmos
1348	O3 Conc, SBUV, Corrected	Schoeberl	ppm	0.5 :: 0.2	1/day	8 x 10 dg :: R	5 km :: Atmos
1335	O3 Total Burden, TOMS Follow-on	Schoeberl	DU	5 :: 2	1/day	1 x 1 dg :: G	Column :: Atmos
1336	O3 Total Burden, TOMS, Version-6	Schoeberl	DU	5 DU :: 2	1/day	1 x 1 dg :: R	Column :: Atmos
1357	OH Conc	Schoeberl	no/cnm^3	30% ::	1/(3 mo)	6 regions :: R	1 km :: 0-15 km
1358	OH Conc	Schoeberl	no/cnm^3	15% :: 10%	1/mo	2 x 3 dg :: G	2 km :: Trop
1359	OH Conc	Schoeberl	ppb	30% ::	1/mo	10 dgZM :: G	2 km :: 0-90 km
2412	Radiation Intensity, UV	Schoeberl	photons/cnm^2/s/nm	20% :: 15%	1/day	2 x 3 dg :: G	2 km :: Trop
1599	Temperature Profile	Schoeberl	K	2 K :: 2	(1-4)/day	2 x 3 dg :: 1-3 sites [few sites]	2 km :: Atmos
1600	Temperature Profile	Schoeberl	K	2K :: 2 K	1/day	4 x 5 dg :: G	3.8 km :: Strat
1601	Temperature Profile	Schoeberl	K	2K :: 2 K	1/day	4 x 5 dg :: G	110 mb :: Trop
1602	Temperature Profile	Schoeberl	K	2K :: 2 K	1/day	4 x 5 dg :: G	3.8 km :: Strat
1603	Temperature Profile	Schoeberl	K	2K :: 2 K	1/day	4 x 5 dg :: G	110 mb :: Trop
1604	Temperature Profile	Schoeberl	K	2 K :: 2 K	1/day	2 x 3 dg :: G	2 km ::
1624	Temperature Profile	Schoeberl	K	2K :: 1K	1/day	2 x 2 dg :: R	2 km :: Atmos
1625	Temperature Profile	Schoeberl	K	2 K :: 1K	1/day	2 x 2 dg :: G	2 km :: Atmos

Appendix J: Output Data Products Listed by IDS Investigator

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol. :: Cover.	Vertical Resol. :: Cover.
1373	Trace Gas Total Burden	Schoeberl	column density	25% :: 15%	[irreg]	N/A :: R	Column :: Atmos
1725	Wind Speed	Schoeberl	m/s	2 m/s :: 2 m/s	(1-4)/day	2 x 3 dg :: G	2 km :: Atmos
1726	Wind Speed	Schoeberl	m/s	2 m/s :: 2 m/s	1/day	4 x 5 dg :: G	3.8 km :: Strat
1727	Wind Speed	Schoeberl	m/s	2 m/s :: 2 m/s	1/day	4 x 5 dg :: G	110 mb :: Trop
1728	Wind Speed	Schoeberl	m/s	2 m/s :: 2 m/s	1/day	4 x 5 dg :: G	3.8 km :: Strat
1729	Wind Speed	Schoeberl	m/s	2 m/s :: 2 m/s	1/day	4 x 5 dg :: G	110 mb :: Trop
1730	Wind Speed	Schoeberl	m/s	2 m/s :: 2 m/s	1/day	2 x 3 dg :: G	2 km ::
1150	CO2 Flux	Sellers	mmol/m^2/s	2 m/s :: 2 m/s	1/hr	1 dg ::	
1487	Heat Flux, Sensible	Sellers	W/m^2		4/day	1 dg ::	
1846	Moisture Flux	Sellers	kg/m^2/s		4/day	1 dg ::	
2712	Vegetation Phenologic State, AVHRR	Sellers			1/mo	20 km ::	
2927	Ice Sheet Accumulation	Simard		20% ::	1/yr	:: Canada/R	:: Sfc
2928	Ice Sheet Boundary (Margin)	Simard		20% ::	1/yr	:: Canada/R	:: Sfc
2899	Ice Sheet Displacement	Simard	cm	10 cm ::	1/yr	:: Canada/R	:: Sfc
2979	Permafrost Distribution	Simard	km	1 km ::	1/(3 yr)	:: Canada/R	:: Sfc
2980	Permafrost Sensitivity	Simard	% cover	1 km ::	1/(3 yr)	:: Canada/R	:: Sfc
3144	Sea Ice Conc	Simard	km	10 km/10% ::	1/(2 wk)	10 km :: Canada/R	:: Sfc
3169	Sea Ice Conc	Simard	km/day	500 m ::	1/(2 wk)	500 m :: Canada/R	:: Sfc
3172	Sea Ice Conc	Simard	km	500 m ::	1/wk	500 m :: Canada/R	:: Sfc
3135	Sea Ice Duration, Ice-free_Season	Simard	day	1 km [?] ::	1/yr [?]	:: Canada/R	:: Sfc
3159	Sea Ice Edge	Simard	km	500 m ::	1/(2 wk)	500 m :: Canada/R	:: Sfc
3193	Sea Ice Extent	Simard	km	500 m ::	1/(2 wk)	500 m :: Canada/R	:: Sfc
3023	Snow Cover	Simard	km	10 km ::	1/wk	10 km :: Canada/R	:: Sfc
3036	Snow Depth	Simard	cm	5 cm/10% ::	1/wk	10 km :: Canada/R	:: Sfc
3044	Snow State	Simard	wet or dry			:: Canada/R	:: Sfc
3001	Snow Water Equivalent	Simard	mm	10 mm/10% ::	1/wk	10 km :: Canada/R	:: Sfc
3164	Wind Velocity, Sea_sfc	Simard	km	25 km ::	1/wk	25 km :: Canada/R	:: Sfc
3539	Heat Flux, Latent	Srokocz			1/mo	>= 1 dg (Select) ::	
3540	Heat Flux, Sensible	Srokocz			1/mo	>= 1 dg (Select) ::	
3545	Heat Flux-Change Statistics, Latent	Srokocz			1/mo	>= 1 dg (Select) ::	
3546	Heat Flux-Change Statistics, Sensible	Srokocz			1/mo	>= 1 dg (Select) ::	
3541	Moisture Flux, Net	Srokocz			1/mo	>= 1 dg (Select) ::	
3547	Moisture Flux-Change Statistics, Net	Srokocz			1/mo	>= 1 dg (Select) ::	
3538	Momentum	Srokocz			1/mo	>= 1 dg (Select) ::	
3544	Momentum-Change Statistics	Srokocz			1/mo	>= 1 dg (Select) ::	
3543	Radiative Flux, LW	Srokocz			1/mo	>= 1 dg (Select) ::	
3542	Radiative Flux, Solar	Srokocz			1/mo	>= 1 dg (Select) ::	
3549	Radiative Flux-Change Statistics, LW	Srokocz			1/mo	>= 1 dg (Select) ::	
3548	Radiative Flux-Change Statistics, Solar	Srokocz			1/mo	>= 1 dg (Select) ::	
3551	Sea Level Height-Change Statistics	Srokocz			5 yr (yr seas, < seas)	1 x 1 dg :: Ocean/R	
3550	Sea Level Height-Variability, RMS	Srokocz			1/keas	1 x 1 dg ::	
3554	Sea_sfc Feature-Occurrence Statistics	Srokocz			occasional	1 km ::	
3555	Sea_sfc Gradient-Changes Statistics	Srokocz			occasional	1 km ::	
3552	Sea_sfc Temperature Statistics	Srokocz			1/mo	1 km ::	
3553	Sea_sfc Temperature-Change Statistics	Srokocz			1/5yr	1 x 1 dg ::	

Appendix J: Output Data Products Listed by IDS Investigator

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol. :: Cover.	Vertical Resol. :: Cover.
1379	Angular Momentum	Tapley	kg m ² /s	1% ::	4/day	:: G	:: Atmos
2857	Geodesic Location, Reference	Tapley	cm	< 2 cm :: <1 cm		N/A :: G	N/A :: Sfc
2860	Geodesic Orientation	Tapley	mas (m-arc. sec)/ms	1mas, 0.1ms ::	1/day	N/A :: G	N/A :: N/A
2868	Land sfc Rebound, Post-Glacial,	Tapley	/yr	5% ::	1k-10 yr	N/A :: G	ns [?] :: Global
2854	Lithosphere Gravity Field	Tapley	mgal	10% ::		200 km :: Ocean	N/A :: Ocean
3089	Ocean Angular Momentum	Tapley	kg m ² /s ²	10% ::	1/day	:: Ocean	:: Ocean
3090	Ocean Current Circulation, Large-scale	Tapley	m	10% ::	1/(1-3 mo) [few mo]	4000 km :: Ocean	N/A :: Sfc
3110	Sea Level Height	Tapley	cm	1-2 cm ::	1/yr	2 x 2 dg :: Ocean	N/A :: Sfc
3124	Torque, Friction	Tapley	mm	10% ::	1/mo	2 x 2 dg :: Ocean	N/A :: Sfc
2875	Torque, Mountain,	Tapley	kg m ² /s ²	5% ::	4/day	50 km :: G	N/A :: Sfc
2876	Torque, Ocean-Land	Tapley	kg m ² /s ²	5% ::	4/day	50 km :: Land	N/A :: Sfc
2067	Cloud Cover	Wielicki	fraction	10% ::	4/day	50 km :: G	N/A :: Sfc
1766	Cloud Drop Phase	Wielicki	water/ice	5% :: 1% 90% Conf :: 90% Conf	18/day [d.n]	25 km :: R	N/A :: Atmos
1773	Cloud Drop Size	Wielicki	um	30% :: 10%	18/day [d.n]	25 km :: R	N/A :: Atmos
1392	Cloud Height, Base	Wielicki	km	1.0 km :: 0.1 km	18/day [d.n]	25 km :: R	0.1 km :: Atmos
1428	Cloud Height, Top	Wielicki	km	0.5 km :: 0.1 km	18/day [d.n]	25 km :: R	0.1 km :: Atmos
1916	Cloud Liq. water Content	Wielicki	g/m ²	30% :: 10%	18/day [d.n]	25 km :: R	N/A :: Atmos
2315	Cloud Optical Depth, LW	Wielicki	dimensionless	25% :: 10%	18/day [d.n]	25 km :: R	N/A :: Atmos
2320	Cloud Optical Depth, SW	Wielicki	dimensionless	25% :: 10%	9/day [d]	25 km :: R	N/A :: Atmos
2151	Radiative Flux Divergence, LW	Wielicki	W/m ² /km	10%clr, 25%clld :: 5%clr, 10%clld	18/day [d.n]	25 km :: R	N/A :: Atmos
2153	Radiative Flux Divergence, SW	Wielicki	W/m ² /km	10%clr, 25%clld :: 5%clr, 10%clld	9/day [d]	25 km :: R	:: Atmos
2167	Radiative Flux, LW, Down	Wielicki	W/m ²	7 W/m ² :: 2 W/m ²	18/day [d.n]	25 km :: R	N/A :: Sfc
2179	Radiative Flux, LW, Net	Wielicki	W/m ²	7 W/m ² :: 2 W/m ²	18/day [d.n]	25 km :: R	N/A :: Sfc
2198	Radiative Flux, LW, Up	Wielicki	W/m ²	5 W/m ² :: 2 W/m ²	18/day [d.n]	25 km :: R	N/A :: TOA
2199	Radiative Flux, LW, Up	Wielicki	W/m ²	7 W/m ² :: 2 W/m ²	18/day [d.n]	25 km :: R	N/A :: Sfc
2220	Radiative Flux, SW, Down	Wielicki	W/m ²	15 W/m ² :: 2 W/m ²	9/day [d]	25 km :: R	N/A :: Sfc
2228	Radiative Flux, SW, Net	Wielicki	W/m ²	15 W/m ² :: 2 W/m ²	9/day [d]	25 km :: R	N/A :: Sfc
2244	Radiative Flux, SW, Up	Wielicki	W/m ²	15 W/m ² :: 2 W/m ²	9/day [d]	25 km :: R	N/A :: Sfc
2245	Radiative Flux, SW, Up	Wielicki	W/m ²	10 W/m ² :: 2 W/m ²	9/day [d]	25 km :: R	N/A :: TOA

**IDS Input Requirements
Listed by
Product Name**

Appendix K

Science Processing Support Office (SPSO)

Goddard Space Flight Center

August 1992

1000

1000

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
3442	Aerosol Angstrom Exponent	Harris		15% :: 5%	1/day	1-20 km :: Ocean/R	
3368	Aerosol Backscatter	Dickinson				<0.5-1 deg :: G	
2105	Aerosol Backscatter	Murakami	km/sr	10-50% ::			
1006	Aerosol Conc	Grose	no/cm ³	20% :: 10%	2/day	15 x 4 dg :: G	2 km :: Strat
1007	Aerosol Conc	Kerr, Sorooshian	type, amount	5% :: 5%	1/day	25 km :: Land	3 km :: Atmos
1008	Aerosol Conc	Moore	mg/cm ³	50% ::	1/2 day	1 km :: G	
1009	Aerosol Conc	Moore	mg/cm ³	50% ::	1/2 day	30 m :: L	
1010	Aerosol Conc	Schoeberl	no/cm ³	10% :: 5%	1/day	200 km :: G	1 km :: Strat
3263	Aerosol Conc, Stratospheric	Mouginis-Mark			1/wk	:: G	:: Strat
3264	Aerosol Conc, Tropospheric	Mouginis-Mark			1/wk	:: G	:: Trop
3374	Aerosol Extinction	Dickinson				<0.5-1 deg :: G	
2327	Aerosol Extinction Coef	Murakami	1/cm	5-10% ::		:: G	N/A :: Atmos
1013	Aerosol Layer Boundary Height	Bates	m	75 m ::		2-200 km :: G	75 m :: Atmos
1015	Aerosol Layer Boundary Height	Isacks	m	75 m ::	1/event, 1/mo	2 km :: Land/R	75 m :: Atmos
3424	Aerosol Mass Loading	Harris	g/m ²	1% :: 1%	1/day	50 km :: Ocean/R	
1016	Aerosol Mass Loading	Isacks	g/m ²	30% :: 10%	1/wk	1-10 km :: Land/R	N/A :: Atmos
1001	Aerosol Optical Depth	Hansen		tau=0.02 ::	1/wk	500 km :: G	:: Trop
2287	Aerosol Optical Depth	Harris		10%, 0.05 :: 5%, 0.02	2/day-1/day	500 km :: G	:: Strat
3444	Aerosol Optical Depth	Harris	eq, atm	tau=0.02 ::	1/day	20-50 km :: Ocean/R	
1002	Aerosol Optical Depth	Hartmann				20 km :: G	3 km :: 0-15 km
2288	Aerosol Optical Depth	Sellers					
2289	Aerosol Optical Depth	Wielicki	dimensionless	0.10 :: 0.10	1/day	1.25 dg :: G	N/A :: Atmos
3446	Aerosol Radiance, Single scattering	Harris	mW/(cm ² -sr-um)	10% :: 5%	1/day	1-20 km :: Ocean/R	
1019	Aerosol Size-distribution	Bates	dimensionless	:: 20%	1/(5-16 day)	15.4 km :: G	Column :: Atmos
1020	Aerosol Size-distribution	Hartmann	um	20% :: 20%	1/day	20 km :: G	N/A :: 0-15 (?)
1024	Aerosol Size-distribution	Isacks		:: 20%	1/wk	2-15 km ::	Column :: Atmos
1021	Aerosol Size-distribution	Schoeberl	no/cm ³ /um	10% :: 5%	1/day	200 km :: G	1 km :: Strat
3423	Aerosol Size-distribution (Radius Dispersion)	Harris	um	0.1 :: 0.05	1/day	50 km :: Ocean/R	
1005	Aerosol XXX	Bates	1/m/sr		1/(1-3 day) [few day]	100 km :: G	1 km :: Atmos
1003	Aerosol XXX	Pyle			2/day	:: G	:: Strat
1004	Aerosol XXX	Sellers					
3361	Albedo, Cloud	Dickinson				<0.5-1 deg :: G	
2006	Albedo, Cloud	Kerr, Sorooshian	%	5% :: 5%	1/yr	500 m :: Land/R	:: Cloud
2007	Albedo, Cloud	Sellers					
2013	Albedo, Land_sfc	Barron	%	1% :: 1%	1/wk	10 km :: G	N/A :: Sfc
1995	Albedo, Land_sfc	Bates	dimensionless		1/day	50 km :: Land	N/A :: Sfc
3363	Albedo, Land_sfc	Dickinson	dimensionless	1% :: 0.5%		<0.5-1 deg :: G	
1997	Albedo, Land_sfc	Hartmann	dimensionless	:: 3%	1/day	20 km :: G	N/A ::
1998	Albedo, Land_sfc	Isacks			1/wk	250 m :: Land/R	N/A :: Sfc
2014	Albedo, Land_sfc	Kerr, Sorooshian	%	10% :: 10%	1/wk	500 m :: Land	N/A :: Sfc
1999	Albedo, Land_sfc	Sellers		10% :: 10%	1/(5 day)	100 km :: Land	N/A :: Sfc
2009	Albedo, Planetary Spectral, TOA	Kerr, Sorooshian	%	10% :: 10%	1/day	25 km :: Land/R	:: TOA
3362	Albedo, Sea_Ice	Dickinson				<0.5-1 deg :: Ocean/Cryo	
2012	Albedo, Sea_Ice	Rotrock	fraction	0.05 :: 0.05	1/(3 day)	25 km :: Polar	N/A :: Sfc
3364	Albedo, Snow	Dickinson				High_res :: Land	
2017	Albedo, Snow	Hansen		0.02 ::	1/wk	500 km :: Land	:: Sfc
2018	Albedo, Snow	Lau	%	10% :: 10%	1/wk	100 m :: Land/R	N/A :: Sfc

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
2019	Albedo, Snow	Simard		2% ::			
2020	Albedo, Spectral, Land_etc	Dozier	dimensionless	5% :: 1%	1/wk, 1/mo	:: Canada/R	N/A :: Sfc
2023	Albedo, TOA	Barnon	%	3 ::	1/day	50 m :: Land/L	
3365	Albedo, TOA	Dickinson				100 km :: G	N/A :: TOA
3366	Albedo, Vegetation	Dickinson				<0.5-1 deg :: G	
3367	Albedo, Vegetation	Dickinson				High_res :: Land	
2024	Albedo, Vegetation	Hansen				High_res :: Land	
1378	Angular Momentum	Bates	kg m ² /s	0.02 ::	1/wk	500 km :: Land	:: Sfc
2025	Anisotropy, LW, broadband, Clear-sky	Wielicki	fraction	1% ::		:: G	:: Atmos
2026	Anisotropy, LW, broadband, Cloudy-sky	Wielicki	fraction	2% :: 1%		10 dg [Angle] :: G/cr	N/A :: Sfc, Atmos
1026	BrO Conc	Groce	mix ratio	20% :: 15%	1/wk	10 dg [Angle] :: G/cld	N/A :: Sfc, Atmos
1027	BrO Conc	Pyle	mix ratio (-log10)	25% :: 10%	2/day	30 x 4 dg :: G	3 km :: Strat
1028	BrO Conc	Schoeberl	ppt	20% :: 1	1/wk	15 x 4 km :: G	3 km :: Strat
1031	BrONO2 Conc	Pyle	mix ratio (-log10)	25% :: 10%	2/day	8 x 10 dg :: G	2 km :: Strat
1037	C2H6 Conc	Schoeberl	ppb	20% :: 0.2	1/wk	15 x 4 km :: G	3 km :: Strat
1050	CFC-11(CFC13) Conc	Groce	mix ratio	15% :: 5%	1/wk	8 x 10 dg :: G	3 km :: Strat
1051	CFC-11(CFC13) Conc	Pyle	mix ratio (-log10)	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Strat
1052	CFC-11(CFC13) Conc	Schoeberl	ppt	15% :: 10	1/day	15 x 4 km :: G	3 km :: Strat
1042	CFC-12(CF2Cl2) Conc	Groce	mix ratio	15% :: 5%	1/wk	2 x 3 dg :: G	1.5 km :: Strat
1043	CFC-12(CF2Cl2) Conc	Pyle	mix ratio (-log10)	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Strat
1044	CFC-12(CF2Cl2) Conc	Schoeberl	ppb	15% :: 10	1/day	15 x 4 km :: G	3 km :: Strat
1057	CFC-XXX Conc	Hansen	mix ratio		1/wk	2 x 3 dg :: G	1.5 km :: Strat
1061	CH3Br Conc	Pyle	mix ratio (-log10)	25% :: 10%	2/day	500 km :: G	:: Trop
1062	CH3Br Conc	Schoeberl	ppt	20% :: 2	1/wk	15 x 4 km :: G	3 km :: Strat
1065	CH3Cl Conc	Groce	mix ratio	15% :: 5%	1/wk	8 x 10 dg :: G	3 km :: Strat
1066	CH3Cl Conc	Pyle	mix ratio (-log10)	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Strat
1067	CH3Cl Conc	Schoeberl	ppt	15% :: 20	1/wk	15 x 4 km :: G	3 km :: Strat
1074	CH4 Conc	Groce	mix ratio	15% :: 5%	2/day	8 x 10 dg :: G	3 km :: Strat
1075	CH4 Conc	Hansen	mix ratio	0.10% ::	1/wk	30 x 4 dg :: G	3 km :: Mid-atmos
1076	CH4 Conc	Hansen	mix ratio (-log10)		1/wk	500 km :: Wetlands	:: Trop
1077	CH4 Conc	Pyle	mix ratio (-log10)	10% :: 5%	2/day	500 km :: G	:: Trop
1078	CH4 Conc	Schoeberl	ppm	15% :: 0.05	1/day	15 x 4 km :: G	3 km :: Strat
3325	CO Conc	Dickinson				2 x 3 dg :: G	1.5 km :: Strat
1116	CO Conc	Groce	mix ratio	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
1117	CO Conc	Hansen	mix ratio	0.10% ::	1/wk	500 km ::	:: Trop
1118	CO Conc	Moore	ppmv	25% :: 10%	1/day	100 km :: G	:: Trop
1119	CO Conc	Pyle	mix ratio (-log10)	15% :: 5%	2/day	15 x 4 km :: G	2 km :: Strat
1120	CO Conc	Schoeberl	ppb	15% :: 5	1/day	2 x 3 dg :: G	2 km :: Trop
1121	CO Conc	Schoeberl	ppb	15% :: 5	1/day	8 x 10 dg :: G	3 km :: Mid-atmos
1138	CO2 Conc	Groce	mix ratio	1% :: 0.5%	1/mo	ZM :: G	10 km :: Mid-atmos
1139	CO2 Conc	Hansen	mix ratio	0.2 ppm ::	1/wk	500 km :: G	:: Trop
1140	CO2 Conc	Kerr, Sorooshian	ppm	15% :: 15%	1/day	50 km :: G	1 km :: Atmos
1141	CO2 Conc	Sellers					
3075	CO2 Partial Pressure	Hansen		2% ::	1/wk	500 km :: Ocean	:: TOO
2563	Chlorophyll Conc	Srokosz	ug/l	10% :: 0.1mg	1/day	1 km :: Ocean [South Atlan]	N/A :: Sfc
3462	Chlorophyll Fluorescence	Harris	mW/(cm ² .sr.um)	25% :: 5%	1/day	1-20 km :: Ocean/R	
3454	Chlorophyll a Conc	Harris	mg/m ³	40% :: 20%	2-10 days	0.25-1 km :: Ocean/R	

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
3455	Chlorophyll a Conc	Harris	mg/m ³	20-30% :: 10-15%	1/day	1-20 km :: Ocean/R	
3456	Chlorophyll a Conc	Harris	mg/m ³	20-30% :: 10-15%	2-10 days	0.25-1 km :: Ocean/R	
1103	ClO Conc	Grose	mix ratio	20% :: 10%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
1104	ClO Conc	Pyle	mix ratio (-log10)	15% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
1105	ClO Conc	Schoeberl	ppb	10% :: 0.02	1/day	8 x 10 dg :: G	3 km :: Strat
1108	ClONO2 Conc	Grose	mix ratio	20% :: 10%	2/day	30 x 4 dg :: G	3 km :: Strat
1109	ClONO2 Conc	Pyle	mix ratio (-log10)	25% :: 10%	2/day	15 x 4 km :: G	3 km :: Strat
1110	ClONO2 Conc	Schoeberl	ppb	15% :: 0.05	1/day	8 x 10 dg :: G	3 km :: Strat
2049	Cloud Cover	Barron	%	5 :: 5	1/day	100 km :: G	N/A :: Cloud
2050	Cloud Cover	Barron	%	5 :: 5	1/day	10 km :: R	N/A :: Cloud
2051	Cloud Cover	Barron	%	5 :: 5	1/day	30 m :: L	N/A :: Cloud
2073	Cloud Cover	Bates	%	10% :: 5%	1/6 hr	1 x 1 dg :: G	N/A :: Cloud
2074	Cloud Cover	Bates	%	10% :: 5%	1/day, 1/mo	1 dg :: G	N/A :: Cloud
3343	Cloud Cover	Dickinson				High_res :: G	
3344	Cloud Cover	Dickinson				Med_res :: G	
3345	Cloud Cover	Dickinson				Low_res :: G	
2052	Cloud Cover	Hansen		3% ::	1/wk	500 km :: G	:: Cloud
3436	Cloud Cover	Harris	%	5-10% :: 2-5%	2/day	5-50 km :: Ocean/R	
2053	Cloud Cover	Isacks	%		1/wk	5 km :: Land/R	N/A :: Cloud
2075	Cloud Cover	Kerr, Sorooshian	%	5% :: 5%	1/day	10 km :: Land/R	N/A :: Cloud
2054	Cloud Cover	Lau	%	5% :: 5%	2/day	50 km :: R	N/A :: Atmos
2055	Cloud Cover	Liu	%			:: Ocean	N/A :: Cloud
2057	Cloud Cover	Moore	% cover	10% :: 10%	1/wk	1 km :: G	
2058	Cloud Cover	Murakami	% cover	10% ::			N/A :: Cloud
2076	Cloud Cover	Rotrock	dimensionless	0.1 :: 0.1	1/day	100 km :: Polar	N/A :: Cloud
2059	Cloud Cover	Sellers			4/day	100 km ::	0.5 km :: Trop
2056	Cloud Cover	Simard		5% ::		:: Canada/R	N/A :: Cloud
2060	Cloud Cover	Srokosz	%	5% :: 1%	2/day	10 km :: Ocean [South Atlan]	N/A :: Cloud
2061	Cloud Cover	Wielicki		5% :: 2%	6/day [d,n]	25-100 km :: G	N/A :: Atmos
2077	Cloud Cover	Wielicki		2% :: 2%	1/16 day	30 m :: R	N/A :: Atmos
2069	Cloud Cover, Cirrus	Bates	/m ²		1/day	100 km :: G	0.5 km :: Trop
2072	Cloud Cover, Cirrus	Bates	dimensionless	0.05 :: 0.025	2/day [d,n]	15 x 45 km :: G	N/A :: Cloud
2070	Cloud Cover, Cirrus	Lau	%	5% :: 5%	1/day	100 km :: G	N/A ::
1759	Cloud Drop Phase	Bates	water/ice		1/day, 1/mo	1 dg :: G	N/A :: Cloud
3346	Cloud Drop Phase	Dickinson				<0.5-1 deg :: G	
1760	Cloud Drop Phase	Wielicki		25% :: 10%	1/16 day	.03-10 km :: R	N/A :: Atmos
1761	Cloud Drop Phase	Wielicki		90% Conf :: 90% Conf	6/day [d,n]	25-100 km :: G	N/A :: Atmos
3347	Cloud Drop Size	Dickinson				<0.5-1 deg :: G	
1771	Cloud Drop Size	Wielicki	fm	25% :: 10%	1/16 day	.03-10 km :: R	N/A :: Atmos
1772	Cloud Drop Size	Wielicki	fm	30% :: 10%	6/day [d,n]	25-100 km :: G	N/A :: Atmos
1777	Cloud Drop Size(Effective Radius)	Wielicki	um	0-40% :: 5%	1/day, 1/mo	1 dg :: G	N/A :: Cloud
3348	Cloud Drop Size-distribution	Bates				<0.5-1 deg :: G	
1775	Cloud Drop Size-distribution	Dickinson	um	20% :: 20%	1/day	10 km :: G	0-15 km :: Cloud
3372	Cloud Emissivity	Hartmann				<0.5-1 deg :: G	
1399	Cloud Height	Dickinson	km (m)	50 m ::	1/wk	500 km :: G	:: Cloud
1380	Cloud Height, Base	Hansen	m	100 m :: 50 m	1/day	100 km :: G	100 m :: Cloud
1381	Cloud Height, Base	Barron	m	100 m :: 50 m	1/day	10 km :: R	100 m :: Cloud

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
1382	Cloud Height, Base	Barron	m	100 m :: 50 m	1/day	30 m :: L	100 m :: Cloud
1383	Cloud Height, Base	Bates	mb	:: 100 mb		25 km :: G	100 mb :: Cloud
1384	Cloud Height, Base	Bates	mb	:: 100 mb	1/(6 hr)	1 x 1 dg :: G	100 mb :: Cloud
3342	Cloud Height, Base	Dickinson					
1385	Cloud Height, Base	Kerr, Sorooshian	km or mb	200m :: 200m	1/hr	1 km :: Land	100 mb :: Trop
1386	Cloud Height, Base	Wielicki	km	1 km :: 0.1 km	6/day [d,n]	25-100 km :: G	0.1 km :: Atmos
1387	Cloud Height, Base	Wielicki	km	0.1 km :: 0.1 km	1/(16 day)	0.2 km :: R	0.1 km :: Atmos
1388	Cloud Height, Base	Wielicki	km	0.1 km :: 0.1 km	2/day [d,n]	50 km :: R	0.1 km :: Atmos
1401	Cloud Height, Cirrus	Bates	m	500 m ::	2/day	50 km :: G	N/A :: Cloud
1402	Cloud Height, Cirrus	Lau	m	100 m ::	2/day	50 km :: G	N/A :: Atmos
1404	Cloud Height, PSC	Pyle			2/day	:: G	:: Strat
1406	Cloud Height, Stratoform	Bates	m	50 m ::	2/day	50 km :: G	N/A :: Cloud
1412	Cloud Height, Top	Barron	m	100 m :: 25 m	1/day	100 km :: G	100 m :: Cloud
1413	Cloud Height, Top	Barron	m	100 m :: 25 m	1/day	10 km :: R	100 m :: Cloud
1414	Cloud Height, Top	Barron	m	100 m :: 25 m	1/day	30 m :: L	100 m :: Cloud
1415	Cloud Height, Top	Bates	mb	:: 100 mb	1/(6 hr)	1 x 1 dg :: G	100 mb :: Cloud
1416	Cloud Height, Top	Bates	km	0.5 km :: 0.25 km	2/day [d,n]	15 x 45 km :: G	N/A :: Cloud
3349	Cloud Height, Top	Dickinson				<0.5-1 deg :: G	
3437	Cloud Height, Top	Harris	km	0.5 :: 0.3	2/day	20-50 km :: Ocean/R	
1417	Cloud Height, Top	Kerr, Sorooshian	km	:: 0.5 km	1/hr	1 km :: Land/R	:: Cloud
1418	Cloud Height, Top	Murakami	km	1 km ::			:: Cloud
1419	Cloud Height, Top	Rotrock	km	0.2km :: 0.2km	1/day	100 km :: Polar	
1420	Cloud Height, Top	Wielicki	km	0.1 km :: 0.1 km	2/day [d,n]	50 km :: R	0.1 km :: Atmos
1421	Cloud Height, Top	Wielicki	km	0.1 km :: 0.1 km	1/(16 day)	0.2 km :: R	0.1 km :: Atmos
1422	Cloud Height, Top	Wielicki	km	0.5 km :: 0.1 km	6/day [d,n]	25-100 km :: G	0.1 km :: Atmos
1890	Cloud Ice Content	Bates	kg/m ²	0.02 :: 0.02	1/day	10 km :: G	
1785	Cloud Ice Content	Hartmann	kg/m ²	0.02 :: 0.02	1/day	10 km :: Ocean	N/A :: Cloud
1892	Cloud Ice Index	Bates	dimensionless		2/day [d,n]	50 km :: G	N/A :: Cloud
3357	Cloud Liq. water Content	Dickinson				<0.5-1 deg :: G	
3358	Cloud Liq. water Content	Dickinson				<0.5-1 deg :: G	
1902	Cloud Liq. water Content	Barron	mm	0.1 :: 0.05	1/day	100 km :: G	1 km :: Cloud
1903	Cloud Liq. water Content	Barron	mm	0.1 :: 0.05	1/day	10 km :: R	1 km :: Cloud
1894	Cloud Liq. water Content	Bates	mm	:: 75%	1/(6 hr)	1 x 1 dg :: G	1yr :: 0-30 km
1904	Cloud Liq. water Content	Bates	mm	0.1 :: 0.1	2/day [d,n]	50 km :: G	N/A :: Cloud
1905	Cloud Liq. water Content	Kerr, Sorooshian				30 m :: Land/R	:: Cloud
1906	Cloud Liq. water Content	Wielicki	g/m ²	20% :: 10%	2/day [d,n]	12-25 km :: G	N/A :: Atmos
1907	Cloud Liq. water Content	Wielicki	g/m ²	50% :: 10%	6/day [d,n]	25-100 km :: G	N/A :: Atmos
1918	Cloud Liq. water Total Column	Abbott	kg/m ²	10% :: 5%	1/(1-2 day)	25 km :: Ocean [Southern]	Column :: Trop
1919	Cloud Liq. water Total Column	Hartmann	kg/m ²	0.05 :: 0.05	1/day	10 km :: Ocean	Column :: Trop
1920	Cloud Liq. water Total Column	Lau	kg/m ²	0.05 :: 0.05	1/day	100 km :: G	N/A :: Trop
1921	Cloud Liq. water Total Column	Sellers					
1922	Cloud Liq. water Total Column	Srokosz	kg/m ²	10% :: 0.1 kg/m ²	2/day	10 km :: Ocean [South Atlan]	N/A :: Trop
2301	Cloud Optical Depth	Barron		3% :: 3%	1/day	100 km :: Ocean	N/A :: Cloud
2302	Cloud Optical Depth	Barron		3% :: 3%	1/day	10 km :: Ocean/R	N/A :: Cloud
2303	Cloud Optical Depth	Barron		3% :: 3%	1/day	30 m :: Ocean/L	N/A :: Cloud
2304	Cloud Optical Depth	Bates	dimensionless		1/day	15 x 45 km :: G	N/A :: Cloud
2305	Cloud Optical Depth	Bates	dimensionless	20% :: 10%	1/day, 1mo	1 dg :: G	N/A :: Cloud

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
3445	Cloud Optical Depth	Harris	none	10-20% :: 5-10%	2/day-1/day	5-50 km :: Ocean/R	N/A :: Cloud
2306	Cloud Optical Depth	Hartmann	dimensionless	25% :: 0.25	1/day	10 km :: Ocean	N/A :: Cloud
3381	Cloud Optical Depth, LW	Dickinson				<0.5-1 deg :: G	N/A :: Atmos
2314	Cloud Optical Depth, LW	Wielicki	dimensionless	25% :: 10%	6/day [d,n]	25-100 km :: G	N/A :: Atmos
3382	Cloud Optical Depth, SW	Dickinson				<0.5-1 deg :: G	N/A :: Atmos
2319	Cloud Optical Depth, SW	Wielicki	dimensionless	25% :: 10%	3/day [d]	25-100 km :: G	N/A :: Cloud
1527	Cloud Pressure, Top	Bates	mb	50 mb :: 20 mb	2/day	5 km :: G	N/A :: Cloud
3330	Cloud Pressure, Top	Dickinson				<0.5-1 deg :: G	:: Cloud
2360	Cloud Radiation	Moore	cal/cm ² /day	10% :: 10%	1/wk	1 km :: G	:: Atmos
2421	Cloud Radiative Forcing	Bates	W/m ²		1/wk	500 km :: G	N/A :: Cld
3615	Cloud Reflectance, Bi-directional (BRDF)	Wielicki		5% :: 2%	TBD	10 deg [Angle] :: G	N/A :: Cloud
2423	Cloud Reflectance, Bi-directional, (BRDF)	Wielicki	fraction	5% :: 2%	1/day	0.2-2 km :: R	N/A :: Cloud
2546	Cloud Spectral Char	Liu				:: G	N/A :: Cloud
2457	Cloud Temperature	Sellers					
2458	Cloud Temperature, Emission	Barron	K	2 :: 1	1/day	100 km :: G	N/A :: Cloud
2459	Cloud Temperature, Emission	Barron	K	2 :: 1	1/day	10 km :: R	N/A :: Cloud
3386	Cloud Temperature, Emission	Dickinson				<0.5-1 deg :: G	
2460	Cloud Temperature, Top	Bates	K	1K :: 0.5 K	2/day [d,n]	15 x 45 km :: G	N/A :: Cloud
3387	Cloud Temperature, Top	Dickinson				<0.5-1 deg :: G	:: Cloud
2461	Cloud Temperature, Top	Hansen	K	5% ::	1/wk	500 km :: G	
3449	Cloud Temperature, Top	Harris	K	1-2 K :: 0.5-1 K	2/day-1/day	5-50 km :: Ocean/R	:: Cloud
2462	Cloud Temperature, Top	Kerr, Sorooshian	K	5% :: 5%	1/hr	500 m :: Land/R	
3396	Cloud Transmissivity	Dickinson				<0.5-1 deg :: G	
2544	Cloud Transmissivity	Roelrock					N/A :: Cloud
3307	Cloud XXX, PSC	Grose	no/cm ³	0.1 :: 0.1	1/day	100 km :: Polar	2 km :: Strat
1158	DMS Conc	Schoeberl	ppb	20% :: 10%	2/day	15 x 4 deg :: G	3 km :: Trop
2904	Drainage Basin Boundary	Lau	km ²	20% :: 0.1	1/wk	8 x 10 deg :: G	N/A :: Sfc
2905	Drainage Network Structure	Barron	m	100m ² :: 100m ²	1/mission	10 m :: Land/L	N/A :: Sfc
2902	Drainage Network Structure	Isacks	feature recog.	30 m ::	1/(3 mo)	30 m :: Land/L	N/A :: Sfc
3419	Electric Conductivity	Dickinson			1/mission, 1/yr	15-30 m :: Land/R	
3420	Electric Field Strength, DC	Dickinson				<0.5-1 deg :: G	
3226	Electron Energy Spectra	Schoeberl	electron/cm ² /keV	20% :: 15%	1/day	<0.5-1 deg :: G	N/A :: 50-700 km
2807	Erosion Rock Weathering	Barron	K		1/mission	10 km :: Land/R	N/A :: Sfc
2808	Erosion Rock Weathering	Barron	km/day		1/mission	100 km :: Land	N/A :: Sfc
1576	Eruption-Plume Ash Chemistry	Isacks	K	1 :: 0.4	1/wk	50 km :: Land/R	1 km :: Trop
3273	Eruption-Plume Dispersal	Mouginis-Mark	km/day	1 km ::	1/orbit, 1/day	1 km :: Land/L	N/A :: Plume_col
3282	Eruption-Plume Fallout Rate	Mouginis-Mark	km/day		1/day	1 km :: Land/R	N/A :: Plume_col
3283	Eruption-Plume HCl Content (Mass Eruption Rate)	Mouginis-Mark	km/day	200m(ver) ::	1/day	1 km :: Land/R	N/A :: Plume_col
3285	Eruption-Plume Height	Mouginis-Mark	km		1/day	1 km :: G	N/A :: Plume_col
3289	Eruption-Plume SO2 Content (Mass Eruption Rate)	Mouginis-Mark	km/day		1/day	100 m :: R	N/A :: Plume_col
3293	Eruption-Plume Temperature	Mouginis-Mark	C	10 C ::	2/day [d,n]	1 km :: G	N/A :: Plume_col
3288	Eruption-Plume SO2 Conc Spike	Mouginis-Mark	km/day		[near-real time ?]	<0.5-1 deg :: G	N/A :: Plume_col
3350	Evaporation, Land_sfc	Dickinson				<0.5-1 deg :: Land	
3398	Fire Extent	Dickinson				<0.5-1 deg :: Land	
2662	Fire XXX	Hansen		10% ::	1/wk	500 km :: Land	:: Sfc
2658	Forest Deforestation	Hansen		10% ::	1/wk	500 km :: Land	:: Sfc
3453	Gelbstoff Absorption Coef	Harris	/m	20% :: 10%	2-10 days	0.25-1 km :: Ocean/R	

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
3213	Gelbstoff Absorption Coef@300nm	Brewer	/m	50% :: 10%	1/day, 1/secs	30 m :: Ocean/L	N/A :: TOO
3214	Gelbstoff Absorption Coef@300nm	Brewer	/m	50% :: 10%	1/day, 1/secs	20 km :: Ocean	N/A :: TOO
2863	Geodetic Site Position, Horizontal	Isacks	mm	3 mm :: 1 mm	1/secs, 1/yr	point :: Land/R	N/A :: Sfc
2865	Geodetic Site Position, Vertical	Isacks	mm	5 mm :: 2 mm	1/secs, 1/yr	point :: Land/R	N/A :: Sfc
1499	Geopotential Height Gradient	Bates	m/km	0.04m/km ::	2/day	4 x 4 dg :: G	1-1.5 km :: Atmos
2923	Glacier Cover	Isacks	km ²	5% :: 2%	1/secs	10-30 m :: Land/L	N/A :: Sfc
2894	Glacier Displacement	Simard	m	10 cm ::	1/yr, 1/secs	:: Canada/R	N/A :: Sfc
1856	H2O (HDO) Conc	Schoeberl	ratio to H2O	10% :: 10%	1/day	8 x 10 dg :: G	3 km :: Strat
1808	H2O Conc	Bates	g/m ³	5-10% :: 1-5%	2/day	4 x 4 dg :: G	1-1.5 km :: 10-80 km
1811	H2O Conc	Grose	mix ratio	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Trop/meso
1819	H2O Conc	Pyle	mix ratio (-log 10)	10% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
1821	H2O Conc	Schoeberl	ppm	10% :: 5% :: 0.05s	1/day	2 x 3 dg :: G	1.5 km :: 0-Strat
1822	H2O Conc	Schoeberl	ppm	10% :: 0.05	1/day	4 x 5 dg :: G	2.5 km :: Meso
1864	H2O Conc, Stratospheric	Hansen		3% ::	1/wk	500 km :: G	Column :: Strat
1166	H2O2 Conc	Grose	mix ratio	25% :: 10%	2/day	30 x 10 dg :: G	3 km :: Strat
1167	H2O2 Conc	Pyle	mix ratio (-log 10)	20% :: 10%	2/day	15 x 4 km :: G	3 km :: Strat
1168	H2O2 Conc	Schoeberl	ppb	20% :: 1L-05s	1/wk	8 x 10 dg :: G	2 km :: Strat
1176	HBr Conc	Grose	mix ratio	25% :: 10%	1/day	30 x 4 dg :: G	3 km :: Strat
1177	HBr Conc	Pyle	mix ratio (-log 10)	25% :: 10%	2/day	15 x 4 km :: G	3 km :: Strat
1178	HBr Conc	Schoeberl	ppt	20% :: 1	1/wk	8 x 10 dg :: G	3 km :: Strat
1190	HCN Conc	Schoeberl	ppb	20% :: 0.01	1/wk	8 x 10 dg :: G	3 km :: Strat
1182	HCl Conc	Grose	mix ratio	15% :: 10%	1/day	30 x 4 dg :: G	3 km :: Mid-atmos
1183	HCl Conc	Pyle	mix ratio (-log 10)	15% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
1184	HCl Conc	Schoeberl	ppb	15% :: 0.1	1/day	4 x 5 dg :: G	2 km :: Strat
1193	HF Conc	Grose	mix ratio	25% :: 10%	1/day	30 x 4 dg :: G	3 km :: Strat
1194	HF Conc	Pyle	mix ratio (-log 10)	15% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
1195	HF Conc	Schoeberl	ppb	15% :: 0.05	1/day	4 x 5 dg :: G	2 km :: Strat
1198	HN03 Conc	Grose	mix ratio	20% :: 5%	2/day	30 x 10 dg :: G	3 km :: Mid-atmos
1199	HN03 Conc	Pyle	mix ratio (-log 10)	15% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
1200	HN03 Conc	Schoeberl	ppb	15% :: 0.1	1/day	2 x 3 dg :: G	2 km :: Strat
1207	HN04 Conc	Grose	mix ratio	50% :: 10%	2/day	30 x 4 dg :: G	3 km :: Strat
1208	HN04 Conc	Schoeberl	ppb	20% :: 0.02	1/wk	8 x 10 dg :: G	3 km :: Strat
1210	HN04 Conc	Pyle	mix ratio (-log 10)	25% :: 10%	2/day	15 x 4 km :: G	3 km :: Strat
1212	HO2 Conc	Grose	mix ratio	25% :: 10%	2/day	30 x 10 dg :: G	3 km :: Mid-atmos
1213	HO2 Conc	Pyle	mix ratio (-log 10)	25% :: 10%	2/day	15 x 4 km :: G	3 km :: Strat
1214	HO2 Conc	Schoeberl	ppb	15% :: 0.02	1/day [d]	6 x 8 dg :: G	2 km :: Strat
1218	HOCl Conc	Grose	mix ratio	20% :: 10%	2/day	30 x 4 dg :: G	3 km :: Strat
1219	HOCl Conc	Pyle	mix ratio (-log 10)	25% :: 10%	2/day	15 x 4 km :: G	3 km :: Strat
1220	HOCl Conc	Schoeberl	ppb	20% :: 0.02	1/wk	8 x 10 dg :: G	3 km :: Strat
1464	Heat Flux, Latent	Bates	W/m ² or mm/day	10 :: 10	1/day	100 km :: Ocean	N/A :: Sfc
1465	Heat Flux, Latent	Bates	W/m ²	:: 20%	1/3 day	100 km :: >60 dg/LAT	N/A :: Sfc
1467	Heat Flux, Latent	Brewer	W/m ²		1/day, 1/secs	:: Ocean	N/A :: Sfc
3327	Heat Flux, Latent	Dickinson				<0.5-1 deg :: Ocean	N/A :: Sfc
1468	Heat Flux, Latent	Lau	W/m ²	10% :: 10%	1/hr	30 m :: Land/L	N/A :: Sfc
1475	Heat Flux, Net	Murakami	W/m ²	5% ::			N/A :: Sfc
1476	Heat Flux, Sensible	Bates	W/m ²	:: 20%	1/day	100 km :: > 60 dg/LAT	N/A :: Sfc
1477	Heat Flux, Sensible	Brewer	W/m ²		1/day, 1/secs	:: Ocean	N/A :: Sfc

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
3328	Heat Flux, Sensible	Dickinson				<0.5-1 deg :: Ocean	
1479	Heat Flux, Sensible	Lau	W/m ²	10% :: 10%	1/hr	30 m :: Land/L	N/A :: Sfc
2131	Heat Flux, Sfc	Dozier	W/m ²	10% :: 10%	1/wk	50 m :: Land/L	N/A :: Sfc
1501	Heating Rate, Latent	Lau	C/day	0.5 C/day :: 5%	1/mo	500 km :: G	2 km :: Trop
1502	Heating Rate, Latent	Lau	C/day	1 C/day :: 5%	1/day	50 km :: R	1 km :: Trop
3326	Heating, Diabatic,	Dickinson				<0.5-1 deg :: G	
1463	Heating, Latent	Bates				25 km :: G	10 m :: Trop
1818	Humidity	Murakami	g/kg	10% ::			
1805	Humidity Profile	Abbott	g/kg	10% :: 5%	1/(1-2 day)	25 km :: Ocean [Southern]	1 km :: Trop
1806	Humidity Profile	Barron	g/kg	10% :: 5%	1/day	10 km :: R	:: Trop
1807	Humidity Profile	Barron	g/kg	10% :: 5%	1/day	100 km :: G	:: Trop
1809	Humidity Profile	Bates	g/kg	10% :: 5%	2/day [d.n]	50 km :: G	2 km :: Atmos
3353	Humidity Profile	Dickinson				<0.5-1 deg :: G	
1812	Humidity Profile	Hansen	mix ratio	3% ::	1/wk	500 km :: G	:: Atmos
1813	Humidity Profile	Hansen		3% ::	1/wk	500 km :: G	:: Trop
3438	Humidity Profile	Harris	g/kg	10% :: 5%	2/day	10-50 km :: Ocean/R	1 km :: Atmos
1814	Humidity Profile	Hartmann	g/kg	10% :: 10%	1/day	10 km :: G	1 km :: 0-15 km
1815	Humidity Profile	Isacks	g/kg	10% :: 0.05	1/wk	50 km :: Land/R	2 km :: Trop
1816	Humidity Profile	Kerr, Sorooshian	g/cm ³	10% :: 10%	2/day	50 km :: Land	1 km :: Atmos
1817	Humidity Profile	Liu	g/kg	0.5 :: 0.5	1/day	25 km :: Ocean	0.5 km :: Trop
1823	Humidity Profile	Sellers	Pa	10% ::	4/day	100 km ::	0.5 km :: Trop
1825	Humidity Profile	Tapley	g/kg	5% ::	4/day	50 km :: G	1 km :: Atmos
1826	Humidity Profile	Wielicki	g/kg	20% :: 10%	4/day [d.n]	1.25 dg :: G	2 km :: Atmos
1824	Humidity Profile, Specific	Srokosz	g/kg	0.3g/kg :: 0.1g/kg	2/day	10 km :: Ocean [South Allen]	
3354	Humidity, Near_sfc	Dickinson				<0.5-1 deg :: G	N/A :: Near_sfc
1820	Humidity, Near_sfc	Rothrock	g/cm ³		1/day	100 km :: Polar	:: Near_sfc
1881	Humidity, Relative, Near_sfc	Kerr, Sorooshian	%	10% :: 10%	1/hr	1 km :: Land/R	N/A :: Sfc
2918	Ice Sheet Cover	Bates	dimensionless		2/day [d.n]	50 km :: Land/Cryo	N/A :: Sfc
2896	Ice Sheet Displacement	Simard	m	10 cm ::	1/yr, 1/dec	:: Canada/R	N/A :: Sfc
2906	Ice Sheet Elevation	Barron	mm	100 ::	1/(3 mo)	10 km :: Land/Cryo	:: Sfc
2907	Ice Sheet Elevation	Barron	mm	100 ::	1/(3 mo)	100 km :: Land/Cryo	:: Sfc
2908	Ice Sheet Elevation	Hacks	m	0.1 ::	2/yr	10 m :: Land/Cryo	N/A :: Sfc
2909	Ice Sheet Elevation	Simard	mm	100 mm ::	1/(3 mo)	10 km :: Land/R	N/A :: Sfc
2910	Ice Sheet Elevation	Simard	mm	100 mm ::	1/(3 mo)	100 km :: Land	N/A :: Sfc
3051	Ice Sheet Temperature	Barron	K	1 K ::	1/wk	10 km :: Land/Cryo	N/A :: Sfc
3052	Ice Sheet Temperature	Barron	K	1 K ::	1/wk	100 km :: Land/Cryo	N/A :: Sfc
3388	Ice Sheet Temperature	Dickinson				<0.5-1 deg :: Land/Cryo	
3053	Ice Sheet Thickness	Barron	mm	100 ::	1/(3 mo)	10 km :: Land/Cryo	:: Sfc
3054	Ice Sheet Thickness	Barron	mm	100 ::	1/(3 mo)	100 km :: Land/Cryo	30 m :: Sfc
3055	Ice Sheet Thickness	Simard	mm	100 mm ::	1/(3 mo)	10 km :: Land/R	N/A :: Sfc
3056	Ice Sheet Thickness	Simard	mm	100 mm ::	1/(3 mo)	100 km :: Land	N/A :: Sfc
2929	Ice Sheet Velocity	Barron	m/s	::		:: Land/Cryo	N/A :: Sfc
1372	Industrial Emissions Conc	Hansen	mix ratio	2% ::	1/wk	500 km :: G	:: Trop
2936	Infiltration Capacity	Kerr, Sorooshian	L/T		1/yr	30 m :: Land/R	
2938	Inundation Extent	Lau	m ²	10% :: 5%	1/wk	100 m :: Land/L	N/A :: Sfc
2939	Inundation Extent	Moore	ha/km ²	20% :: 20%	1/wk, 1/mo	1-25 km :: Land	:: Sfc
2942	Inundation Extent	Moore	ha/km ²	20% :: 20%	1/wk	1-25 km :: Land	

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
3384	Irradiance, Incident, Sfc	Dickinson				<0.5-1 deg :: G	
2269	Irradiance, Solar	Abbot	W/m ²	5% :: 1%	1/(1-2 day)	1-4 km :: Ocean [Southern]	N/A :: Sfc
2271	Irradiance, Solar	Grose	W/m ² /km	5% :: 1%	2/day	15 x 4 dg :: G	:: TOA
2272	Irradiance, Solar	Hansen		0.05% ::	1/wk	500 km :: G	:: TOA
2273	Irradiance, Solar	Pyle	W/m ² /km	:: 1%	2/day	15 x 4 km :: G	3 km :: Strat
2275	Irradiance, UV Solar	Brewer	E/m ² /Hz	20% :: 5%	1/day, 1/secs	30 m :: Ocean/L	
2276	Irradiance, UV Solar	Brewer	E/m ² /Hz	20% :: 5%	1/day, 1/secs	20 km :: Ocean	
2279	Irradiance, Visible Solar	Brewer	E/m ² /Hz	20% :: 5%	1/day, 1/secs	20 km :: Ocean	
2280	Irradiance, Visible Solar	Brewer	E/m ² /Hz	20% :: 5%	1/day, 1/secs	30 m :: Ocean/L	
3062	Lake Extent	Barron	m ²	10% :: 10%	1/day	:: Land/R	N/A :: Sfc
3059	Lake Extent	Isacks		::		15-30 m :: Land/L	N/A :: Sfc
3203	Lake Water Attenuation Coef	Richy, Batista	/m	10% :: 10%	1/wk	1 km :: Land/R	N/A :: TOO
2812	Lake Water Chemistry, XXX	Richy, Batista	g/m ³	1(10%)5% :: [5%] 10%	1/wk	1 km :: Land/R	N/A :: Sfc
2654	Lake Water Chlorophyll Conc	Richy, Batista	g/m ³	20% :: 10%	1/wk	1 km :: Land/R	N/A :: TOO
3291	Lake Water Temperature, Volcano Summit	Mouginis-Mark	C	2 C ::	1/(3 mo)	100 m :: Land/L	N/A :: Sfc
2855	Land Heat Capacity	Kerr, Sorooshian				30 m :: Land/R	N/A :: Sfc
2541	Land Thermal Inertia	Kerr, Sorooshian	cal/cm ² /K/s	.008 :: .004	1/(16 day)	60 m :: Land/R	N/A :: Sfc
2112	Land sfc Emissivity	Bates	dimensionless	0.05 :: 0.025	2/day [d,n]	50 km :: Land	N/A :: Sfc
3373	Land sfc Emissivity	Dickinson				<0.5-1 deg :: Land	
2123	Land sfc Emissivity	Kerr, Sorooshian	%	0.05 :: 0.05	1/yr	90 m :: Land/R	N/A :: Sfc
2120	Land sfc Emissivity	Wielicki	fraction	0.025 :: 0.025	2/day [d,n]	1.25 dg :: Land	N/A :: Sfc
3487	Land sfc Emissivity, LW (8-12u)	Cihlar	fraction	0.025 :: 0.025	10 day	1.25 deg :: Canada/R	N/A :: Sfc
2125	Land sfc Emissivity, Spectral	Isacks			1/yr	15-90 m :: Land/L	N/A :: Sfc
2437	Land sfc Reflectance Factor, MODIS	Cihlar		0.05 :: 0.001	1/(3 mo)	0.25 km :: Canada/R	N/A :: Atmos
2041	Land sfc Reflectance, Bi-directional Spectral, (BRDF)	Sellers				250-500 m :: Land	
3369	Land sfc Reflectance, Bi-directional, (BRDF)	Dickinson				<0.5-1 deg :: G	
2034	Land sfc Reflectance, Bi-directional, (BRDF)	Sellers					
2043	Land sfc Reflectance, Bi-directional, SW Broadband	Wielicki	fraction	5% :: 2%	1/day [d]	0.2-2km :: R	N/A :: Sfc, Atmos
2044	Land sfc Reflectance, Bi-directional, SW Broadband	Wielicki	fraction	5% :: 2%		10 dg [Angle] :: G	N/A :: Sfc, Atmos
2426	Land sfc Reflectance, Directional	Brewer		3% :: 1%	1/day, 1/secs	1.7 km :: Ocean	N/A :: Sfc
2427	Land sfc Reflectance, Directional	Brewer		3% :: 1%	1/day, 1/secs	22 km :: Ocean/L	N/A :: Sfc
2428	Land sfc Reflectance, Directional	Kerr, Sorooshian	%	3% :: 5%	1/(2 mo)	30 m :: Land/R	:: Sfc
1545	Land sfc Roughness	Barron	m	10% :: 0.1	1/mision, 1/yr	10 km :: Land/R	N/A :: Sfc
1546	Land sfc Roughness	Barron	m	10% :: 0.1	1/mision, 1/yr	30 m :: Land/L	N/A :: Sfc
1547	Land sfc Roughness	Barron	m	10% :: 0.1	1/mision, 1/yr	100 km :: Land	N/A :: Sfc
1553	Land sfc Roughness	Isacks	cm	2 cm :: 1 cm	1/mision, 1/mo	30 m :: Land/L	N/A :: Sfc
1549	Land sfc Roughness, Aerodynamic	Kerr, Sorooshian	cm	0.1 m :: 0.2 m	1/secs	25 km :: Land	N/A :: Sfc
1550	Land sfc Roughness, Aerodynamic	Lau	cm	10% :: 10%	1/yr	30 m :: Land/L	N/A :: Sfc
1551	Land sfc Roughness, Aerodynamic	Lau	cm	10% :: 10%	1/wk	10 km :: Land/R	N/A :: Sfc
1552	Land sfc Roughness, Geometric	Kerr, Sorooshian	cm	0.1 cm :: 0.2 cm	2/mo	25 km :: Land	N/A :: Sfc
3389	Land sfc Temperature	Dickinson				High res :: Land	
3390	Land sfc Temperature	Dickinson				Low res :: Land	
3391	Land sfc Temperature	Dickinson				Med res :: Land	
2477	Land sfc Temperature	Hansen	K	0.2 C ::	1/wk	500 km :: Land	:: Sfc
2476	Land sfc Temperature	Richy, Batista	K		1/day	:: Land/R	N/A :: Sfc
2478	Land sfc Temperature	Sellers		::		500 m ::	
3312	Land sfc Temperature	Sinard	K	1.3 :: 1.07	2/day	1 km :: R/Canada	N/A :: Sfc

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
3313	Land_sfc Temperature	Simard	K	1.3 :: 1.07	2/day	10 km :: R/Canada	N/A :: Sfc
2472	Land_sfc Temperature, Skin	Barron	K	1 :: 0.5	1/day	30 m :: Land/L	N/A :: Sfc
2473	Land_sfc Temperature, Skin	Barron	K	1 :: 0.5	1/day	10 km :: Land/R	N/A :: Sfc
2474	Land_sfc Temperature, Skin	Barron	K	1 :: 0.5	1/day	100 km :: G	N/A :: Sfc
2475	Land_sfc Temperature, Skin	Bates	K	1.0K :: 0.5 K	2/day (d,n)	50 km :: Land	N/A :: Sfc
3450	Land_sfc Temperature, Skin	Harris	K	0.5 :: 0.2	2/day	20-50 km :: Ocean/R	N/A :: Sfc
2496	Land_sfc Temperature, Skin	Isacks	K	1-3 :: 1	1/wk	1 km :: Land/R	N/A :: Sfc
2497	Land_sfc Temperature, Skin	Isacks	K	1-6 :: 0.3	1/wk	90 m :: Land/L	N/A :: Sfc
2479	Land_sfc Temperature, Skin	Wielicki	K	1 K :: 0.5 K	4/day (d,n)	1.25 dg :: Land	N/A :: Sfc
2338	Land_sfc Temperature-Difference, Day-Night	Bates	K	0.5 K :: 0.25 K	1/day	50 km :: Land	N/A :: Sfc
3395	Land_sfc Temperature-Difference, Day-Night	Dickinson				<0.5-1 deg :: G	
2849	Landform Distribution	Barron	m	30 m ::	1/3 mo	30 m :: Land/L	N/A :: Sfc
2851	Landform Feature Distribution	Isacks	feature recog.		1/mision	15-30 m :: Land/R	N/A :: Sfc
2869	Landform Scarp-fault Elevation	Isacks	cm	10 cm :: 5 cm	1/mision	[2-D sect] :: Land/L	N/A :: Sfc
3262	Lava-Flow Advance Rate	Mouginis-Mark	m/day	30 m(hor) ::	2/day (d,n)	30 m :: Land/L	N/A :: Sfc
3266	Lava-Flow Areal Change	Mouginis-Mark	m ²	(30m) ² ::	2/day (d,n)	30 m :: Land/L	N/A :: Sfc
3292	Lava-Flow Temperature	Mouginis-Mark	C	10 C ::	2/day (d,n)	30 m :: Land/L	N/A :: Sfc
3297	Lava-Flow Thickness	Mouginis-Mark	cm	5 cm(ver) ::	1/ever	30 m :: Land/L	N/A :: Sfc
2096	Level-1B Backscatter Coef, ALT	Srokosz	dB	0.2dB :: 0.1dB	1/(10 day)	10 km :: Ocean [South Allan]	N/A :: Sfc
3448	Level-1B Backscatter Coef, HIRIS	Harris	/m	20% :: 10%	2-10 days	0.25-1 km :: Ocean/R	N/A :: Sfc
2102	Level-1B Backscatter Coef, SAR_EOS	Cihlar	dB	2 dB :: 1 dB	1/3 mo	25 m :: Canada/R	N/A :: Sfc
2109	Level-1B Backscatter Coef, STIKSCAT	Srokosz	dB	0.3 dB :: 0.1 dB	1/day	25 km :: Ocean [South Allan]	N/A :: Sfc
3125	Level-1B Backscatter Waveforms, ALT	Srokosz	dB	0.02(bin) :: 0.1dB	1/(10 day)	10 km :: Ocean [South Allan]	N/A :: Sfc
2106	Level-1B Backscatter, SAR	Srokosz	dB	0.2 dB :: TBD	[occasional]	25 m :: Ocean [South Allan]	N/A :: Sfc
2097	Level-1B Backscatter, STIKSCAT	Brewer	dB	10% :: TBD	1/day, 1/season	25 km :: Ocean	N/A :: Sfc
2346	Level-1B Radiance, AIRS	Bates					
2349	Level-1B Radiance, AMSU-A	Bates	K	0.2dg NEdT :: 0.2dg NEdT	2/day (d,n)	40 x 40 km :: G	N/A :: N/A
2355	Level-1B Radiance, AVHRR(ESA?)	Wielicki	W/m ² /sr/um	15% LW, 2K :: SW2%, LW	2/day (d,n)	1 km :: R	N/A :: Atmos
2358	Level-1B Radiance, CERES	Wielicki	W/m ² /sr/um	1/2% LW, 1% :: SW2%, LW	6/day (d,n)	25 km :: R	N/A :: Atmos
2351	Level-1B Radiance, MIS	Bates	K	0.2dg NEdT :: 0.2dg NEdT	2/day (d,n)	15 x 15 km :: G	N/A :: N/A
2389	Level-1B Radiance, MODIS	Sellers	W/m ² /sr/um				
3310	Level-1B Radiance, MODIS	Srokosz	W/m ² /sr/um	0.05% ::	1/day	1 km :: R	N/A :: Atmos
2390	Level-1B Radiance, MODIS	Wielicki	W/m ² /sr/um	15% LW, 1K :: SW2%, LW	2/day (d,n)	0.25-1 km :: R	N/A :: Atmos
3485	Level-1B Radiance, MODIS-T	Sellers					
2414	Level-2 Radiance, Water-leaving	Brewer	E/m ² /sr/Hz	10% :: TBD	1/day, 1/season	30 m :: Ocean/L	N/A :: TOO
2415	Level-2 Radiance, Water-leaving	Brewer	E/m ² /sr/Hz	10% :: TBD	1/day, 1/season	20 km :: Ocean	N/A :: TOO
3447	Level-2 Radiance, Water-leaving	Harris	mW/(cm ² -sr-um)	10% :: 5%	1/day	1-20 km :: Ocean/R	
3340	Lightning Intensity	Dickinson				<0.5-1 deg :: G	
1757	Lightning Rate	Barron	/s	10% :: 10%	1/day	10 km :: G	N/A :: Atmos
3341	Lightning Rate	Dickinson	#/hr	1 :: 1	1/(10 min)	<0.5-1 deg :: G	
1758	Lightning Rate	Kerr, Sorooshian	%		1/mision, 1/mo	1 km :: Land	:: Trop
2778	Mineral Conc, Rock Soil	Isacks				15-30 m :: Land/L	N/A :: Sfc
3356	Moisture Flux, Horizontal,	Dickinson				<0.5-1 deg :: G	N/A :: Trop
1229	N2O Conc	Grose	mix ratio	15% :: 5%	1/day	30 x 4 dg :: G	3 km :: Mid-atmos
1230	N2O Conc	Hansen	mix ratio		1/wk	500 km :: G	:: Trop
1231	N2O Conc	Pyle	mix ratio (-log10)	15% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
1232	N2O Conc	Schoeberl	ppb	15% :: 10	1/day	2 x 3 dg :: G	2 km :: Strat

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
1250	N2O5 Conc	Groce	mix ratio	20% :: 10%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
1251	N2O5 Conc	Pyle	mix ratio (-log10)	20% :: 10%	2/day	15 x 4 km :: G	3 km :: Strat
1252	N2O5 Conc	Schoeberl	ppb	15% :: 20%	1/day	8 x 10 dg :: G	3 km :: Strat
1262	NO Conc	Groce	mix ratio	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
1263	NO Conc	Pyle	mix ratio (-log10)	15% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
1264	NO Conc	Schoeberl	ppb	15% :: 2x1.0m	1/day [d]	4 x 5 dg :: G	2 km :: Mid-atmos
1269	NO2 Conc	Groce	mix ratio	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
1270	NO2 Conc	Pyle	mix ratio (-log10)	15% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
1271	NO2 Conc	Schoeberl	ppb	10% ::	1/day	4 x 5 dg :: G	2 km :: Mid-atmos
1279	NO3 Conc	Groce	mix ratio	20% :: 10%	1/day [n]	30 x 4 dg :: G	3 km :: Mid-atmos
1280	NO3 Conc	Pyle	mix ratio (-log10)	25% :: 10%	1/day [n]	15 x 4 km :: G	3 km :: Strat
1294	O(3P) Conc	Groce	mix ratio	30% :: 10%	1/wk	30 x 4 dg :: G	3 km :: Mid-atmos
1295	O(3P) Conc	Pyle	mix ratio (-log10)	15% :: 5%	1/wk	15 x 4 km :: G	2 km :: Strat
1296	O(3P) Conc	Schoeberl	ppb	15% :: 10%	1/wk [d]	8 x 10 dg :: G	3 km :: Strat
1305	O3 Conc	Bates	ppb	5-10% :: 1-5%	2/day	4 x 4 dg :: G	1-1.5 km :: 10-80 km
1306	O3 Conc	Groce	mix ratio	2x.5% :: 2%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
1307	O3 Conc	Hansen	mix ratio	3% ::	1/wk	500 km :: G	:: Atmos
1309	O3 Conc	Moore	ppmv	25% :: 10%	1/day	100 km :: G	N/A :: TOA
1310	O3 Conc	Murakami	ppmv (mix ratio)	10% ::			
1331	O3 Conc	Murakami	ppm ³	5-10% :: 2-10%			
1311	O3 Conc	Pyle	mix ratio (-log10)	5% :: 2%	2/day	15 x 4 km :: G	3 km :: Strat
1312	O3 Conc	Schoeberl	ppm	10% :: 10%	1/day	4 x 5 dg :: G	2.5 km :: Trop
1313	O3 Conc	Schoeberl	ppm	10% :: 5%	1/day	2 x 3 dg :: G	1.5 km :: Mid-atmos
1308	O3 Total Burden	Kerr, Sorooshian	ppm	5% :: 5%	1/day	25 km :: G	Column :: Atmos
1342	O3(18000) Conc	Schoeberl	ratio to ^ (48)O3	10% :: 10%	1/wk	8 x 10 dg :: G	5 km :: Strat
1354	OCS Conc	Schoeberl	ppb	20% :: 0.1	1/wk	8 x 10 dg :: G	3 km :: Strat
1349	OCIO Conc	Groce	mix ratio	20% :: 10%	2/day	30 x 4 dg :: G	3 km :: Strat
1350	OCIO Conc	Pyle	mix ratio (-log10)	25% :: 10%	2/day	15 x 4 km :: G	3 km :: Strat
1351	OCIO Conc	Schoeberl	ppb	20% :: 0.01	1/wk [n]	8 x 10 dg :: G	3 km :: Strat
1355	OH Conc	Groce	mix ratio	25% :: 10%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
1211	OH Conc	Pyle	mix ratio (-log10)	20% :: 10%	2/day	15 x 4 km :: G	2 km :: Strat
1356	OH Conc	Schoeberl	ppb	10% :: 0.2x.05m	1/day [d]	6 x 8 dg :: G	2 km :: Strat
2599	Ocean Productivity, Primary	Brewer	mmol-C/m ² /day	50% :: 5%	1/day, 1/week	20 km :: Ocean	N/A :: TOO
2600	Ocean Productivity, Primary	Brewer	mmol-C/m ² /day	50% :: 5%	1/day, 1/week	30 m :: Ocean/L	N/A :: TOO
3460	Ocean Productivity, Primary	Harris	mg-C/m ³ /day	30% :: 5%	1/day	1-20 km :: Ocean/R	N/A :: TOO
2598	Ocean Productivity, Primary, Near sfc	Abbott	mg-C/m ³ /day		1/(1-2 day)	1-4 km :: Ocean [Southern]	N/A :: Near sfc
2597	Ocean Productivity, Primary, Total Column	Abbott	mg-C/m ² /day		1/(1-2 day)	1-4 km :: Ocean [Southern]	N/A :: TOO
1573	Ocean Productivity, Total Column	Hansen	C [K]	0.3 C ::	1/wk	500 km :: G	:: Strat
3204	Ocean Water Attenuation Coef	Abbott	m	20% :: 5%	1/(1-2 day)	1-4 km :: Ocean [Southern]	N/A :: TOO
3201	Ocean Water Attenuation Coef, Diffuse	Brewer	m	25% :: TBD	1/day, 1/week	30 m :: Ocean/L	N/A :: Sfc
3202	Ocean Water Attenuation Coef, Diffuse	Brewer	m	25% :: TBD	1/day, 1/week	20 km :: Ocean	N/A :: Sfc
3461	Ocean Water Attenuation Coef@490nm	Harris	m	25% :: 10%	1/day	1-20 km :: Ocean/R	:: TOO
3080	Ocean Water Salinity	Bates	o/oo		1/(3 day)	100 km :: > 60 dgLAT	:: TOO
3079	Ocean Water Salinity	Hansen	%	0.02% ::	1/wk	500 km :: Ocean	:: TOO
3081	Ocean Water Salinity	Lau	%	10% :: 10%	1/wk	500 km :: Ocean/Trop	:: TOO
3083	Ocean Water Salinity, Sub ice	Redrock	o/oo	0.02 o/oo :: 0.02 o/oo	1/(3 day)	500 km :: Polar	N/A :: TOO
3115	Ocean Water Temperature, Internal	Bates	K		1/(3 day)	100 km :: > 60 dgLAT	:: [v] [7]

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
3116	Ocean Water Temperature, Internal	Hansen	K		1/wk	500 km :: Ocean	:: Sub_sfc
3218	Ocean Water Temperature, Internal	Lau	K	0.5 K ::	1/day	10 km :: Ocean/R	10 m :: Sub_sfc
3117	Ocean Water Temperature, Internal	Rothrock	K	0.02 K :: 0.02 K	1/(3 day)	500 km :: Polar	-1v ::
3430	Ocean Wave Direction	Harris	deg	10 :: 10	1/day	10 deg :: Ocean/R	
3126	Ocean Wave Height	Bates	m	20% :: 20%	1/day	50-75 m :: Ocean	N/A :: Sfc
3431	Ocean Wave Height	Harris	m	10-20% :: 5-20%	1-10 days	7-25 km :: Ocean/R	
3128	Ocean Wave Height, Along-track	Bates	cm	>5m, 10% ::		7 km :: Ocean	N/A :: Sfc
3130	Ocean Wave Height, Significant	Abbott	m	10% :: 5%	1/(10-20 day)	10-20 km :: Ocean [Southern]	N/A :: Sfc
3131	Ocean Wave Height, Significant	Stokoz	m	>(5m, 5%) :: 0.1m	1/day	10 km :: Ocean/R	N/A :: Sfc
3432	Ocean Wave Length	Harris	km	10% :: 10%	1/day	1-10 km :: Ocean/R	
3463	Ocean Wave Power Spectrum, 2-D	Bates				:: Ocean	N/A :: Sfc
3383	Optical Depth, Total	Dickinson				<0.5-1 deg :: G	
2326	Optical Depth, Total	Isacks		5-15% :: 1-10%	1/wk	10-50 km :: Land/R	Column :: Atmos
2325	Optical Depth, Total	Kerr, Sonoschian	eq atm	10% :: 10%	1/(5-16 day)	10 km :: Land/R	:: Atmos
2561	Organic Carbon Conc, Dissolved	Brewer	mol-C/m ³	100% :: 10%	1/day, 1/week	20 km :: Ocean	N/A :: TOO
2562	Organic Carbon Conc, Dissolved	Brewer	mol-C/m ³	100% :: 10%	1/day, 1/week	30 m :: Ocean/L	N/A :: TOO
2579	Organic Matter Conc, Dissolved	Abbott	mmol/m ³	50% :: 20%	1/(1-2 day)	1-4 km :: Ocean [Southern]	N/A :: TOO
3457	Organic Matter Conc, Dissolved	Harris	mg/m ³	100% :: 30%	1/day	1-20 km :: Ocean/R	
1365	PAN Conc	Schoeberl	ppb	20% :: 0.01	1/day	8 x 10 dg :: G	3 km :: Strat
2328	PAR	Moore	W/m ² /sr		1/day, 1/wk	30 m :: Land/L	
2329	PAR	Moore	W/m ² /sr	20% :: 10%	1/day, 1/wk	500 m :: Land/R	
2263	PAR, Incident, (IPAR)	Schimed	SE, % ::	10% :: 1%	1/day	500 m :: 6 sites/L	N/A :: Sfc
2264	PAR, Incident, (IPAR)	Schimed	SE, % ::	10% :: 1%	1/wk	30 m :: 6 sites/L	N/A :: Sfc
2265	PAR, Incident, (IPAR)	Schimed	SE, % ::	10% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
3498	PAR, Incident, Vegetation, (IPAR)	Cihlar	%	10% :: 1%	1 day	250-1000 m :: Canada/R	N/A :: Sfc
1510	PBL Height	Barron	m	75 m ::	1/day	10 km :: R	100 m :: Mixed_lyr
1511	PBL Height	Barron	m	75 m ::	1/day	100 km :: G	100 m :: Mixed_lyr
1512	PBL Height	Bates	m	75 m ::		2-200 km :: G	75 m :: Trop
3329	PBL Height	Dickinson					
1513	PBL Height	Sellers					
3209	Phytoplankton Backscatter	Abbott	mw/km ² /sr/km	50% :: 20%	1/day	1-4 km :: Ocean	N/A :: N/A
3077	Pigment Conc	Hansen		2% ::	1/wk	500 km :: Ocean	:: TOO
3458	Pigment Conc	Harris	mg/m ³	30% :: 10%	1/day	1-20 km :: Ocean/R	
3459	Pigment Conc, Accessory	Harris	mg/m ³	20% :: 10%	2-10 days	0.25-1 km :: Ocean/R	
2695	Pigment Conc, Non-photosynthetic	Moore	relative	20% :: 20%	1/(16 day)	1 km :: Land/R	:: Sfc
2696	Pigment Conc, Non-photosynthetic	Moore	relative	20% :: 20%	1/(16 day)	30 m :: Land/L	
2584	Pigment Conc, Phycoerythrin	Abbott	mg/m ³	50% :: 20%	1/(1-2 day)	1-4 km :: Ocean [Southern]	N/A :: TOO
2587	Pigment Conc, Phytoplankton	Abbott	mg/m ³	35% :: 10%	1/(1-2 day)	1-4 km :: Ocean [Southern]	N/A :: TOO
2590	Pigment Conc, Phytoplankton	Rothrock	mg/m ³		1/(2 day)	10 km :: Polar	N/A :: TOO
1858	Precipitable Water	Abbott	kg/m ²	10% :: 5%	1/(1-2 day)	25 km :: Ocean [Southern]	Column :: Trop
1859	Precipitable Water	Barron	mm	3% :: 1%	1/day	30 m :: L	Column :: Trop
1860	Precipitable Water	Barron	mm	3% :: 1%	1/day	10 km :: R	Column :: Trop
1861	Precipitable Water	Barron	mm	3% :: 1%	1/day	100 km :: G	Column :: Trop
1862	Precipitable Water	Bates	mm	5% :: 3%	2/day [djd]	50 km :: G	N/A :: Trop
3355	Precipitable Water	Dickinson				<0.5-1 deg :: G	
3439	Precipitable Water	Harris			1/day	10-25 km :: Ocean/R	
3440	Precipitable Water	Harris	mm	5% :: 3%	2/day	20-50 km :: Ocean/R	

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
1865	Precipitable Water	Kerr, Sorooshian	cm	10% :: 10%	2/day	50 km :: Land	Column :: Atmos
1866	Precipitable Water	Liu	g/cm ²	0.5 :: 0.5	1/day	25 km :: Ocean	Column :: Trop
1867	Precipitable Water	Murakami	g/cm ²	20% ::			
1810	Precipitable Water	Richey, Batista	%	5% :: 5%	1/day	:: R	:: Trop
1863	Precipitable Water	Richey, Batista	mm/mo ?		1/wk	1 km :: R	Column :: Trop
1868	Precipitable Water	Srokosz	kg/m ²	1 kg/m ² :: 0.1 kg/m ²	2/day	10 km :: Ocean [South Atlan]	N/A :: Atmos
1926	Precipitation Amount	Barton	mm/day	2 :: 1	1/day	100 km :: G	N/A :: Trop
1927	Precipitation Amount	Barton	mm/day	2 :: 1	1/day	10 km :: R	N/A :: Trop
1928	Precipitation Amount	Brewer	mm/day	2 :: TBD	1/day, 1/week	:: Ocean/L	N/A :: Sfc
1929	Precipitation Amount	Brewer	mm/day	2 :: TBD	1/day, 1/week	:: Ocean	N/A :: Sfc
3488	Precipitation Amount	Cihlar	mm	0.1 mm :: 0.1 mm	1/day	500m :: Canada/R	N/A :: Sfc
1930	Precipitation Amount	Hansen	mm	10% ::	1/wk	500 km :: G	:: Sfc
3441	Precipitation Amount	Harris	mm/day	2 :: 1	2/day	20-50 km :: Ocean/R	N/A :: Trop
1931	Precipitation Amount	Hartmann	mm/day	10 :: 10	1/day	10 km :: Ocean	N/A :: Sfc
1932	Precipitation Amount	Isacks	mm		1/wk	5-50 km :: Land/R	N/A :: Trop
1935	Precipitation Amount	Lau	mm/day	2 :: 2	1/mo	500 km :: G	N/A :: Sfc
1936	Precipitation Amount	Lau	mm/day	2 :: 2	1/day	50 km :: R	N/A :: Sfc
1938	Precipitation Amount	Murakami	mm/day	10% ::			
1939	Precipitation Amount	Sellers	mm		4/day	100 km ::	
1940	Precipitation Amount	Wielicki	mm/day	50% :: 25%	4/day [d,n]	25-50 km :: G	N/A :: Trop
1934	Precipitation Amount, Daily	Kerr, Sorooshian	mm	1 mm :: 1 mm	1/day	1 km :: Land/R	N/A :: Sfc
1973	Precipitation Amount, Rain	Liu	mm/day	1 :: 1	2/day	25 km :: Ocean	N/A :: Trop
1974	Precipitation Amount, Rain	Moore	mm/wk	10% :: 10%	1/wk	1 km :: G	
1957	Precipitation Amount, Rain, Monthly	Kerr, Sorooshian	mm	10% :: 10%	1/mo	500 m :: Land/L	N/A :: Sfc
3489	Precipitation Amount, Snow	Cihlar	mm/wk	10% :: 10%	1 wk	1 km :: Canada/R	N/A :: Sfc
1983	Precipitation Amount, Snow	Moore	mm/wk	10% :: 10%	1/wk		
1984	Precipitation Amount, Snow	Sellers					
1949	Precipitation Conc, Ice	Bates	g/m ³			10 km :: G	7 W :: Trop
2981	Precipitation Depth	Lau	mm	10% :: 10%	1/day	1 km :: Land/R	N/A :: Sfc
1968	Precipitation Index	Bates	mm	2mm/hr :: 1mm/hr	2/day [d,n]	50 km :: G	N/A :: Trop
1970	Precipitation Index, Antecedent	Bates	dimensionless		1/day	26-52 km :: Land	N/A :: Sfc
1958	Precipitation Rate	Bates	mm/hr			10 km :: G	1 W :: Sfc
1933	Precipitation Rate	Isacks	mm/hr		1/event, 1/mo	5-50 km :: Land/R	N/A :: Sfc
1960	Precipitation Rate	Lau	mm/hr	25% :: 10%	1/hr	100 m :: Land/L	N/A :: Sfc
1937	Precipitation Rate	Sinnard	mm/hr	20% ::		:: Canada/R	N/A :: Trop
1972	Precipitation Rate, Rain	Abbot	mm/hr	5% :: 1%	(1-2)/day	25 km :: Ocean [Southern]	N/A :: Trop
1954	Precipitation Rate, Rain	Bates	g/m ³			10 km :: G	7 W :: Trop
3359	Precipitation Rate, Rain	Dickinson	mm/hr	20% :: 20%	1/day	500 m :: G	N/A :: Trop
1959	Precipitation Rate, Rain	Kerr, Sorooshian	mm/hr	10% :: 1mm/hr	2/day	10 km :: Ocean [South Atlan]	N/A :: Trop
1975	Precipitation Rate, Rain	Srokosz	mm/hr			<0.5-1 deg :: G	
3360	Precipitation Rate, Snow	Dickinson	mm	10% :: 10%	1/hr	100 m :: Land/L	N/A :: Sfc
1965	Precipitation Storm Depth (Precip-thickness)	Lau	type (snow, water)			10 km :: G	N/A :: Sfc
1966	Precipitation Drop Phase, Sfc	Bates	mb	0.05 :: 2%		15 x 4 dg :: G	3 km :: Mid-atmos
1516	Pressure	Croce	mb	5% :: 5%	2/day	25 km :: Land	3 km :: Trop
1518	Pressure	Kerr, Sorooshian	mb		1/hr	:: Land/R	N/A :: Sfc
1517	Pressure, Sfc	Isacks	mb				
1533	Pressure, Sfc	Lau	mb	5% ::	1/day	100 km :: G	N/A :: Sfc

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
1519	Pressure, Sfc	Rothrock	mb	1 mb :: 1 mb	1/day	500 km :: Polar	N/A :: Sfc
1520	Pressure, Sfc	Tapley	mb	1.5 mb ::	4/day	50 km :: G	N/A :: Sfc
3255	Proton Energy Spectra	Schoeberl	proton/cm ² /h/MeV	20% :: 15%	1/day	5 dg LAT :: G <0.5-1 deg :: G	N/A :: 50-700 km
3385	Radiation Budget	Dickinson					
2357	Radiation Budget	Hansen			1/wk	500 km :: G	1.5 km :: Strat
2374	Radiation Intensity, IR	Schoeberl	photons/cm ² /s/cm	1% (-1K) :: 0.5%	1/day	100 km :: G	:: Strat
2411	Radiation Intensity, UV	Schoeberl	photons/cm ² /s/nm	5% :: 2%	1/day	:: G	N/A :: Sfc
2413	Radiation Intensity, Visible	Schoeberl	photons/cm ² /s/nm	5% :: 2%	1/day	:: G	N/A :: Sfc
3490	Radiative Flux	Chilr	W/m ²		1 wk	1 km ² ::	N/A :: Sfc
2150	Radiative Flux Divergence, LW	Wielicki	W/m ² /km	%clr/25%clr :: 5%clr/10%	6/day [d,n]	1.25 dg :: G	:: Atmos
2152	Radiative Flux Divergence, SW	Wielicki	W/m ² /km	%clr/25%clr :: 5%clr/10%	3/day [d]	1.25 dg :: G	:: Atmos
2141	Radiative Flux, Broadband, Down	Richy, Batista	W/m ²		2/day	:: Land/R	N/A :: TOA
2142	Radiative Flux, LW	Kerr, Sorooshian	W/m ²	1 W/m ² :: 1 W/m ²	1/hr	8 km :: Land/R	N/A :: Sfc
2185	Radiative Flux, LW	Barron	W/m ²	10 :: 5	1/day	100 km :: G	N/A :: Sfc
2186	Radiative Flux, LW	Barron	W/m ²	10 :: 5	1/day	30 m :: L	N/A :: Sfc
2187	Radiative Flux, LW	Barron	W/m ²	10 :: 5	1/day	10 km :: R	N/A :: Sfc
2189	Radiative Flux, LW	Barron	W/m ²	10 :: 5	1/day	100 km :: G	N/A :: TOA
2255	Radiative Flux, LW	Brewer	W/m ²		1/day	:: Ocean/L	
2256	Radiative Flux, LW	Brewer	W/m ²		1/day, 1/keas	:: Ocean	N/A :: Sfc
2188	Radiative Flux, LW	Hartmann	W/m ²	5% :: 2%	1/day	<30 km :: Ocean	N/A :: TOA
2190	Radiative Flux, LW	Hartmann	W/m ²	5% :: 2%	1/day	<30 km :: Ocean	N/A :: Sfc
2154	Radiative Flux, LW	Lau	W/m ²	10W/m ² :: 10%	1/day	500 km :: G	
2385	Radiative Flux, LW	Srokosz	W/m ²	10W/m ² :: 1W/m ²	2/day	10 km :: Ocean [South Altan]	N/A :: Sfc ?
3375	Radiative Flux, LW, Down	Dickinson				<0.5-1 deg :: G	:: Sfc
2163	Radiative Flux, LW, Down	Kerr, Sorooshian	W/m ²	10% :: 10%	[diurnal]	500 m :: Land/R	0.5 km ::
2164	Radiative Flux, LW, Down	Sellers	W/m ²	20% :: 20%	4/day	100 km :: Land	N/A :: Sfc
2165	Radiative Flux, LW, Down	Wielicki	W/m ²	7 W/m ² :: 2 W/m ²	6/day [d,n]	1.25 dg :: G	N/A ::
2173	Radiative Flux, LW, Net	Bates	W/m ²		2/day [d,n]	50 km :: Land	N/A ::
2174	Radiative Flux, LW, Net	Bates	W/m ²		2/day [d,n]	50 km :: Ocean	N/A :: Sfc ?
3376	Radiative Flux, LW, Net	Dickinson				<0.5-1 deg :: G	N/A :: Sfc
2175	Radiative Flux, LW, Net	Wielicki	W/m ²	7 W/m ² :: 2 W/m ²	6/day [d,n]	1.25 dg :: G	N/A :: Atmos
2183	Radiative Flux, LW, Net Up	Murakami	W/m ²	2% ::			N/A :: TOA
3377	Radiative Flux, LW, TOA	Dickinson				<0.5-1 deg :: G	N/A :: TOA
2191	Radiative Flux, LW, Up	Bates	W/m ²		2/day [d,n]	50 km :: G	N/A :: Sfc ?
3378	Radiative Flux, LW, Up	Dickinson				<0.5-1 deg :: G	N/A :: TOA
2192	Radiative Flux, LW, Up	Kerr, Sorooshian	W/m ²	15% :: 15%	[diurnal]	500 m :: Land/R	N/A :: TOA
2395	Radiative Flux, LW, Up	Murakami	mW/m ² /sr/cm	10% ::		100 km :: Land	0.5 km ::
2193	Radiative Flux, LW, Up	Sellers	W/m ²	20% :: 20%	4/day	1.25 dg :: G	N/A :: TOA
2194	Radiative Flux, LW, Up	Wielicki	W/m ²	5 W/m ² :: 2 W/m ²	6/day [d,n]	1.25 dg :: G	N/A :: Sfc
2195	Radiative Flux, LW, Up	Wielicki	W/m ²	7 W/m ² :: 2 W/m ²	6/day [d,n]	1.25 dg :: G	N/A :: Sfc
2137	Radiative Flux, Net	Smard		10% ::		:: Canada/R	N/A :: Sfc
2236	Radiative Flux, SW	Barron	W/m ²	10 :: 5	1/day	30 m :: L	N/A :: Sfc
2237	Radiative Flux, SW	Barron	W/m ²	10 :: 5	1/day	100 km :: G	N/A :: Sfc
2238	Radiative Flux, SW	Barron	W/m ²	10 :: 5	1/day	10 km :: R	N/A :: Sfc
2239	Radiative Flux, SW	Barron	W/m ²	10 :: 5	1/day	100 km :: G	N/A :: TOA
1492	Radiative Flux, SW	Brewer	W/m ²		1/day, 1/keas	:: Ocean	
1493	Radiative Flux, SW	Brewer	W/m ²		1/day, 1/keas	:: Ocean/L	

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
2213	Radiative Flux, SW	Hartmann	W/m ²	0.5% :: 0.5%	1/day	20 km :: G	N/A :: TOA
2214	Radiative Flux, SW	Hartmann	W/m ²	0.5% :: 0.5%	1/day	20 km :: G	N/A :: Sfc
2215	Radiative Flux, SW	Lau	W/m ²	10W/m ² :: 10%	1/day	500 km :: G	N/A :: Sfc
2400	Radiative Flux, SW	Srokosz	W/m ²	10W/m ² :: 1W/m ²	2/day	10 km :: Ocean [South Allen]	
2216	Radiative Flux, SW, Down	Kerr, Sorooshian	W/m ²	10% :: 10%	[diurnal]	500 m :: Land/R	:: Sfc
2217	Radiative Flux, SW, Down	Sellers	W/m ²	20% :: 20%	1/hr	100 km :: Land	
2218	Radiative Flux, SW, Down	Wielicki	W/m ²	15 W/m ² :: 2 W/m ²	3/day [d]	1.25 dg :: G	N/A :: Sfc
3379	Radiative Flux, SW, Net	Dickinson	W/m ²	15 W/m ² :: 2 W/m ²	3/day [d]	<0.5-1 deg :: G	N/A :: Sfc
2226	Radiative Flux, SW, Net	Wielicki	W/m ²	2% ::	3/day [d]	1.25 dg :: G	N/A :: Atmos
2234	Radiative Flux, SW, Net, Down	Murakami	W/m ²			<0.5-1 deg :: G	N/A :: Sfc
3380	Radiative Flux, SW, TOA	Dickinson	W/m ²	15% :: 15%	[diurnal]	500 m :: Land/R	N/A :: Sfc
2240	Radiative Flux, SW, Up	Kerr, Sorooshian	W/m ²	10 W/m ² :: 2 W/m ²	3/day [d]	1.25 dg :: G	N/A :: TOA
2241	Radiative Flux, SW, Up	Wielicki	W/m ²	15 W/m ² :: 2 W/m ²	3/day [d]	1.25 dg :: G	N/A :: Sfc
2242	Radiative Flux, SW, Up	Wielicki	W/m ²	5% :: 2%	2/day	20-50 km :: Ocean/R	
3443	Radiative Flux, Sea_sfc	Harris	W/m ²	10% :: 10%	1/season	1 m :: Land/L	N/A :: Sfc
2888	River Channel Geometry	Barron	m	10 :: 10	1/mission	30 m :: Land/R	N/A :: Sfc
3049	River Channel Geometry, Major-stream	Lau	m ²			15-30 m :: Land/L	N/A :: Sfc
2982	River Channel Patterns	Isacks	m ²			few sites :: Land	:: Sfc
2889	River Discharge	Moore	m ³ /s	5% :: 5%	1/wk, 1/mo	30 m :: Land/L	N/A :: Sfc
3063	River Extent	Barron	m ²	10% :: 10%	1/day	30 m :: Land/L	N/A :: Sfc
3064	River Extent	Barron	m ²	10% :: 10%	1/day	10 km :: Land/R	N/A :: Sfc
2914	River Floodplain Extent	Lau	m ²	10% :: 5%	1/wk	100 m :: Land/L	N/A :: Sfc
2915	River Floodplain Extent	Moore	ha/km ²	20% :: 20%	1/wk	1-25 km :: Land	
2913	River Floodplain Extent	Richy, Batista	m ²	10% :: 10%	1/season	1 km :: Land/R	N/A :: Sfc
2984	River Stage (Flooding)	Moore	m		1/wk, 1/mo	point :: Land	:: Sfc
2983	River Stage (Flooding)	Richy, Batista	cm	5 cm :: 5%	1/season	100 m :: Land/R	N/A :: Sfc
3205	River Water Attenuation Coef	Richy, Batista	/m	10% :: 10%	1/wk	1 km :: Land/R	N/A :: TOA
2809	River Water Chemistry	Richy, Batista	g/m ³	10% :: 5% :: [5%] : 10%	1/wk	1 km :: Land/R	N/A :: Sfc
2655	River Water Chlorophyll Conc	Richy, Batista	g/m ³	20% :: 10%	1/wk	1 km :: Land/R	N/A :: TOA
2985	Runoff	Lau	m ³ /s	5% :: 5%	1/day	:: Land/L, R	N/A :: Sfc
1366	SO2 Conc	Schoeberl	ppb	20% ::	1/day	8 x 10 dg :: G	3 km :: Strat
2780	Sand Depth	Isacks	m	0.5 :: 0.5	1/season	50 m :: Land/L	N/A :: Sfc
3136	Sea_Ice Conc	Barron		5% :: 5%	1/day	100 km :: Ocean/Cryo	N/A :: Sfc
3137	Sea_Ice Conc	Barron		5% :: 5%	1/day	10 km :: Ocean/Cryo	N/A :: Sfc
3167	Sea_Ice Conc	Barron		5% :: 5%	1/day	30 m :: Ocean/Cryo	N/A :: Sfc
3168	Sea_Ice Conc	Barron		5% :: 5%	1/day	10 km :: Ocean/Cryo	N/A :: Sfc
3182	Sea_Ice Conc	Bates	fractional cov		1/3 day	100 km :: > 60 dg LAT	:: Sfc
3149	Sea_Ice Conc	Brewer	%	10% :: 1%	1/day, 1/season	10 km :: Ocean/Cryo	N/A :: Sfc
3141	Sea_Ice Conc	Simard	%	10km/10% ::	1/7 day	10 km :: Canada/R	N/A :: Sfc
3142	Sea_Ice Conc	Srokosz	%	10% :: 1%	1/day	10 km :: Ocean/Cryo	N/A :: Sfc
3165	Sea_Ice Conc, First-year	Rothrock	fraction	0.2 :: 0.2	1/3 day	25 km :: Ocean/Cryo	N/A :: Sfc
3178	Sea_Ice Conc, GCM	Rothrock	fraction	0.03 :: 0.03	1/3 day	25 km :: Ocean/Cryo	N/A :: Sfc
3173	Sea_Ice Conc, Multi-year	Barron	m ²		1/day	100 km :: Ocean/Cryo	N/A :: Sfc
3174	Sea_Ice Conc, Multi-year	Barron	m ²		1/day	10 km :: Ocean/Cryo	N/A :: Sfc
3175	Sea_Ice Conc, Multi-year	Rothrock	fraction	0.2 :: 0.3	1/3 day	25 km :: Ocean/Cryo	N/A :: Sfc
3168	Sea_Ice Conc, Multi-year	Barron	fraction	10% :: 10%	2/day (4d)	25 km :: Ocean/Cryo	N/A :: Sfc
3177	Sea_Ice Conc, Multi-year	Barron	fraction			25 km :: Ocean/Cryo	N/A :: Sfc

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
3150	Sea_Ice Cover	Hansen	fraction	3% ::	1/wk	500 km :: Ocean/Cryo	N/A :: Sfc
3188	Sea_Ice Cover	Rothrock	m	0.03 :: 0.03	1/(3 day)	25 km :: Ocean/Cryo	N/A :: Sfc
3183	Sea_Ice Cover	Simard	m	50 cm ::		:: Canada/R	N/A :: Sfc
2919	Sea_Ice Cover	Wielicki	fraction	10% :: 5%	1/day	50 km :: Ocean/Cryo	N/A :: Sfc
3156	Sea_Ice Edge	Abbott	presence/absence		1/day	25 km :: Ocean/Cryo	N/A :: Sfc
3189	Sea_Ice Edge	Rothrock	fraction	0.05 :: 0.05	1/(3 day)	25 km :: Ocean/Cryo	N/A :: Sfc
3157	Sea_Ice Edge	Simard		25km ::	1/(7 day)	25 km :: Canada/R	N/A :: Sfc
3190	Sea_Ice Edge	Simard		10km/10% ::	1/(7 day)	10 km :: Canada/R	N/A :: Sfc
3158	Sea_Ice Edge	Srokosz	dg lat_lon	0.1 dg :: 0.01 dg	1/day	N/A :: Ocean/Cryo	N/A :: Sfc
2121	Sea_Ice Emissivity	Bates	dimensionless		1/day	10 km :: Polar	N/A :: Sfc
3160	Sea_Ice Extent	Barron		5% :: 5%	1/day	100 km :: Ocean/Cryo	N/A :: Sfc
3161	Sea_Ice Extent	Barron		5% :: 5%	1/day	10 km :: Ocean/Cryo	N/A :: Sfc
3162	Sea_Ice Extent	Simard		25km ::	1/(7 day)	25 km :: Canada/R	N/A :: Sfc
3166	Sea_Ice Leads	Barron		5% :: 5%	1/day	100 km :: Ocean/Cryo	N/A :: Sfc
3103	Sea_Ice Motion	Rothrock	km/day	0.5 km :: 0.5 km	1/(3 day)	25 km :: Ocean/Cryo	N/A :: Sfc
3196	Sea_Ice Motion, Regional	Simard		500 m ::	1/(7 day)	500 m :: Canada/R	N/A :: Sfc
1555	Sea_Ice Roughness	Bates	mm	100 mm ::	1/(3 mo)	:: Polar	N/A :: Sfc
2489	Sea_Ice Temperature	Bates	K		1/day	10 km :: Polar	N/A :: Sfc
2490	Sea_Ice Temperature	Rothrock	K	2 K :: 2 K	1/(3 day)	25 km :: Polar	N/A :: Sfc
3120	Sea_Ice Temperature	Simard	K	0.5K ::		:: Canada/R	N/A :: Sfc
3418	Sea_Ice Thickness	Dickinson	cm			<0.5-1 deg :: Ocean/Cryo	
3105	Sea_Level Height	Abbott	cm	5 cm :: 3 cm	1/(10-20 day)	10-20 km :: Ocean [Southern]	N/A :: Sfc
3106	Sea_Level Height	Brewer	m	5% :: 1%	1/day, 1/season	7 km :: Ocean	N/A :: Sfc
3111	Sea_Level Height, Along-track	Bates	cm	10 cm ::		7 km :: Ocean	N/A :: Sfc
3427	Sea_Level Height, Along-track	Harris	cm	2% :: 1%	1-10 days	7-25 km :: Ocean/R	
3425	Sea_sfc Feature position	Harris	deg long_lat	120 m :: 60 m	1 wk	0.25-1 km :: Ocean/R	
3426	Sea_sfc Feature velocity	Harris	km/day	20% :: 10%	1 wk	0.25-1 km :: Ocean/R	
2438	Sea_sfc Reflectance Factor, MODIS-T	Cihlar		0.05 :: 0.001	1/(3 mo)	0.5 km :: Canada/R	
2504	Sea_sfc Temperature (SST)	Abbott	K	0.5 K :: 0.05 K	(1-2)/day	1-4 km :: Ocean [Southern]	N/A :: Sfc
2505	Sea_sfc Temperature (SST)	Abbott	K	1 K :: 0.1 K	(1-2)/day	50 km :: Ocean [Southern]	N/A :: Sfc
2506	Sea_sfc Temperature (SST)	Barron	K	0.5 K ::	1/day	100 km :: Ocean	N/A :: Sfc
2507	Sea_sfc Temperature (SST)	Barron	K	0.5 K ::	1/day	10 km :: Ocean/R	N/A :: Sfc
2508	Sea_sfc Temperature (SST)	Bates	K	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G/R	N/A :: Sfc
2509	Sea_sfc Temperature (SST)	Bates	K	0.5K :: 0.4K	2/day [day]	50 km :: Ocean	N/A :: Sfc
2510	Sea_sfc Temperature (SST)	Brewer	K	0.5 K :: 0.5 K	1/day, 1/season	30 m :: Ocean/L	N/A :: Sfc
2511	Sea_sfc Temperature (SST)	Brewer	K	0.5 K :: 0.5 K	1/day, 1/season	20 km :: Ocean	N/A :: Sfc
3392	Sea_sfc Temperature (SST)	Dickinson				<0.5-1 deg :: Ocean	
3393	Sea_sfc Temperature (SST)	Dickinson				<0.5-1 deg :: Ocean	
2512	Sea_sfc Temperature (SST)	Hansen	K	0.2 C ::	1/wk	500 km :: Ocean	:: Sfc
3451	Sea_sfc Temperature (SST)	Harris	K	0.5-1 K :: 0.2-0.3 K	1/day	0.25-1 km :: Ocean/R	
3452	Sea_sfc Temperature (SST)	Harris	K	0.5-1 K :: 0.2-0.3 K	1/day	20 km :: Ocean/R	
2513	Sea_sfc Temperature (SST)	Hartmann	K	0.5 K :: 0.5 K	1/day	10 km :: Ocean	N/A :: Sfc
2514	Sea_sfc Temperature (SST)	Lau	K	0.5 K ::	1/wk	100 km :: Ocean	N/A :: Sfc
2515	Sea_sfc Temperature (SST)	Lau	K	0.2 K :: 0.2 K	1/wk	200 km :: Ocean	N/A :: Sfc
2516	Sea_sfc Temperature (SST)	Lau	K	0.5 K ::	1/day	50 km :: R	N/A :: Sfc
2517	Sea_sfc Temperature (SST)	Liu	K	0.5 :: 0.5	1/wk	10 km :: G	N/A :: Sfc
2518	Sea_sfc Temperature (SST)	Murakami	K	0.2 K ::		:: G	N/A :: Sfc

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
2519	Sea_sfc Temperature (SST)	Rothrock	K	1 K :: 1 K	1/2 day	30 km :: G	N/A :: Sfc
2520	Sea_sfc Temperature (SST)	Srokosz	K	0.3K(1R) :: 0.1K	2/day	100-1 km :: Ocean [South Atlantic]	N/A :: Sfc
2521	Sea_sfc Temperature (SST)	Wielicki	K	1 K :: 0.5 K	1/wk	1.25 dg :: Ocean	N/A :: Sfc
3429	Sea_sfc Topographic Height	Harris	cm	2% :: 1%	1-10 days	7-25 km :: Ocean/R	N/A :: Sfc
2767	Snow Contaminant Conc	Dozier	mg/hr ³	20% :: 20%	1/wk, 1/mo	50 m :: Snow/L	N/A :: Sfc
3003	Snow Cover	Barron	m ²	5% :: 5%	1/day	100 km :: Land	N/A :: Sfc
3004	Snow Cover	Barron	m ²	5% :: 5%	1/day	30 m :: Land/R	N/A :: Sfc
3005	Snow Cover	Barron	m ²	5% :: 5%	1/day	10 km :: Land/R	N/A :: Sfc
3006	Snow Cover	Bates	dimensionless	<5% :: <5%	2/day [d,n]	50 km :: Land	N/A :: Sfc
3007	Snow Cover	Dozier	km ²	10% :: 10%	1/day, 1/wk	10 km :: Land	N/A :: Sfc
3008	Snow Cover	Hansen	km ²	0.02 ::	1/wk	50 x 50 m :: Land/L	N/A :: Sfc
3009	Snow Cover	Isacks	km ²	5% :: 2%	1/mo	500 km :: Land	N/A :: Sfc
3010	Snow Cover	Isacks	km ²	5% :: 2%	1/mo	1 km :: Land/R	N/A :: Sfc
3011	Snow Cover	Lau	km ²	5% :: 2%	1/season	15-30 m :: Land/L	N/A :: Sfc
3012	Snow Cover	Lau	km ²	50 :: 10	1/wk	100 m :: Land/L	N/A :: Sfc
3013	Snow Cover	Lau	km ²	50 :: 10	1/wk	1 km :: Land/L	N/A :: Sfc
3014	Snow Cover	Murakami	km ²	10% ::		:: Land	N/A :: Sfc
3015	Snow Cover	Sellers	km	10km ::	1/(1-4 day)	100 km ::	N/A :: Sfc
3026	Snow Cover	Simard	fraction	10% :: 5%	1/7 day	10 km :: Canada/R	N/A :: Sfc
3016	Snow Cover	Wielicki	km ²	10% :: 10%	1/day	50 km :: Land	N/A :: Sfc
3028	Snow Cover, Wet	Dozier	km ²	20% :: 20%	1/wk, 1/mo	50 m :: Snow/L	N/A :: Sfc
3414	Snow Depth	Dickinson	cm	5 cm :: 5 cm		Med res :: Land	N/A :: Sfc
3031	Snow Depth	Isacks	cm	5 cm :: 5 cm	1/season	30 m :: Land/L	N/A :: Sfc
3032	Snow Depth	Lau	cm	5 cm :: 5 cm	1/wk	5 km :: Land/R	N/A :: Sfc
3033	Snow Depth	Lau	cm	5 cm :: 5 cm	1/wk	30 m :: Land/R	N/A :: Sfc
3034	Snow Depth	Simard	cm	5 cm/10% ::	1/7 day	10 km :: Canada/R	N/A :: Sfc
3415	Snow Extent	Dickinson				Low res :: Land	N/A :: Sfc
3416	Snow Extent	Dickinson				Med res :: Land	N/A :: Sfc
3037	Snow Grain Size	Dozier	mm	200% :: 200%	1/wk, 1/mo	50 m :: Snow/L	N/A :: Sfc
3039	Snow Liq. water Content	Dozier	N/A	100% :: 100%	1/wk, 1/mo	50 m :: Snow/L	N/A :: Sfc
3027	Snow Liq. water Content	Moore			1/wk	1 km :: Land	N/A :: Sfc
3040	Snow Mass	Murakami	g/cm ²	10% ::		:: Land	N/A :: Sfc
3043	Snow State	Simard	K	1 K :: 0.3 K	1/wk	:: Canada/R	N/A :: Sfc
2500	Snow Temperature, Sfc	Dozier	mm	10% :: 10%	1/day	500 m :: Snow/L	N/A :: Sfc
2998	Snow Water Equivalent	Barron	mm	10% :: 10%	1/day	10 km :: Land/R	N/A :: Sfc
2999	Snow Water Equivalent	Barron	mm	10% :: 10%	1/day	30 m :: Land/L	N/A :: Sfc
3491	Snow Water Equivalent	Chiler	mm	10% :: 10%	1 wk	1 km :: Canada/R	N/A :: Sfc
3000	Snow Water Equivalent	Dozier	m	20% :: 20%	1/wk, 1/mo	50 m :: Land/L	N/A :: Sfc
2996	Snow Water Equivalent	Lau	mm	10 mm :: 10 mm	1/wk	30 m :: Land/L	N/A :: Sfc
2997	Snow Water Equivalent	Lau	mm	10 mm :: 10 mm	1/wk	5 km :: Land/R	N/A :: Sfc
3046	Snow Water Equivalent	Moore	mm		1/wk	1 km :: Land	N/A :: Sfc
3045	Snow Water Equivalent	Simard	mm	10 mm/10% ::	1/7 day	10 km :: Canada/R	N/A :: Sfc
2791	Soil Bulk Density	Kerr, Sorooshian	g/cm ³	5% :: 5%	1/yr	1 km :: Land	N/A :: Sfc
2810	Soil Chemistry	Richey, Batista	kg/ha	20% :: 20%	1/season	1 km :: Land/R	N/A :: Sfc
2792	Soil Class	Kerr, Sorooshian	class	10% :: 5%	1/yr	30 m :: Land/R	N/A :: Sfc
2794	Soil Composition	Barron		10% :: 5%	1/mission	100 km :: Land	N/A :: Sfc
2795	Soil Composition	Barron		10% :: 5%	1/mission	30 m :: Land/L	N/A :: Sfc

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
2796	Soil Composition	Barron		10% :: 5%	1/mission	10 km :: Land/R	N/A :: Sfc
2797	Soil Extent	Barron	N/A	5 : 7 :: 5 : 7	1/yr	100 km :: Land	N/A :: Sfc
2798	Soil Extent	Barron	N/A	5 : 7 :: 5 : 7	1/yr	10 km :: Land/R	N/A :: Sfc
2799	Soil Extent	Barron	N/A	5 : 7 :: 5 : 7	1/yr	30 m :: Land/L	N/A :: Sfc
3409	Soil Extent	Dickinson				Low_res :: Land	
2800	Soil Extent	Moore	ha	15% :: 15%	1/yr	1 km :: Land	:: Sfc
2917	Soil Hydraulic Conditions, Unsaturated	Kerr, Sorooshian	L/T	0.05 ::		30 m :: Land/R	:: Sfc
3492	Soil Hydraulic Properties	Cihlar		5-10% :: 5%	once	1 km :: Canada/R	N/A :: Sfc
2916	Soil Hydraulic Properties	Sinard		10% ::		:: Canada/R	N/A :: Sfc
2802	Soil Mineral Type	Kerr, Sorooshian	mineral type		1/yr	30 m :: Land/R	:: Sfc
2946	Soil Moisture	Barron	cm ³ /cm ³	0.05 :: 0.02	1/day	10 km :: Land/R	N/A :: Sfc
2947	Soil Moisture	Barron	cm ³ /cm ³	0.05 :: 0.02	1/day	100 km :: Land	N/A :: Sfc
2948	Soil Moisture	Barron	cm ³ /cm ³	0.05 :: 0.02	1/day	30 m :: Land/L	N/A :: Sfc
2959	Soil Moisture	Bates	% vol	10-25% :: 5-10%	1/(3 day), 1/wk	60-100 m :: Land	N/A :: Sfc
2960	Soil Moisture	Bates		:: 40%		43 km :: Land	N/A :: Sfc
3493	Soil Moisture	Cihlar	% saturation	10% :: 20%		1 km :: Canada/R	N/A :: Sfc
3411	Soil Moisture	Dickinson				Low_res :: Land	
3412	Soil Moisture	Dickinson				Med_res :: Land	
3413	Soil Moisture	Dickinson				High_res :: Land	
2962	Soil Moisture	Hansen		10% ::	1/wk	500 km :: Land	:: Sfc
2963	Soil Moisture	Isacks	% vol	10% :: 5%	1/mo, 1/yr	60-100 m :: Land/L	N/A :: Sfc
2964	Soil Moisture	Lau	% vol	10% :: 5%	1/(3 day)	50 m :: Land/L	N/A :: Sfc
2965	Soil Moisture	Lau	% vol	10% :: 5%	1/(3 day)	3 km :: Land/R	N/A :: Sfc
2966	Soil Moisture	Moore	% saturated	30% :: 30%	1/wk, 1/mo	1-25 km :: Land	:: Sfc
3066	Soil Moisture	Murakami	cm			:: Land	N/A :: Sfc
2958	Soil Moisture	Richey, Batista	cm		1/mo	1 km :: Land/R	N/A :: Sfc
2967	Soil Moisture	Sellers			1/(1-4 day)	100 km ::	:: Sfc
2949	Soil Moisture	Sinard		10% ::		:: Canada/R	N/A :: Sfc
2785	Soil Proportion, Bare	Barron	%	5 :: 5	1/season	10 km :: Land/R	N/A :: Sfc
2786	Soil Proportion, Bare	Barron	%	5 :: 5	1/season	100 km :: Land	N/A :: Sfc
2787	Soil Proportion, Bare	Barron	%	5 :: 5	1/season	30 m :: Land/L	N/A :: Sfc
2788	Soil Proportion, Bare	Sinard		10% ::		:: Canada/R	N/A :: Sfc
3370	Soil Reflectance, Bi-directional, (BRDF)	Dickinson				<0.5-1 deg :: Land	
2042	Soil Reflectance, Bi-directional, (BRDF)	Kerr, Sorooshian	dimensionless	10% :: 10%	1/season	N/A :: Land	N/A :: Sfc
3331	Soil Roughness	Dickinson				High_res :: Land	
3332	Soil Roughness	Dickinson				Low_res :: Land	
3494	Soil Spectral characteristics	Cihlar	%	5% :: 10%	once	250-1000 m :: Canada/R	N/A :: Sfc
2501	Soil Temperature	Lau	K	0.5 K :: 0.5 K	1/(3 day)	100 m :: Land/L	N/A :: Sfc
2502	Soil Temperature	Lau	K	1 K :: 1 K	1/(3 day)	1 km :: Land/R	N/A :: Sfc
3311	Soil Temperature	Sinard	K	0.5 :: 1.0	2/day	100 m :: R/Canada	N/A :: Sfc
1561	Stratopause Height	Bates	km	1 km :: 0.5 km	2/day (d.b)	50 km :: G	N/A :: Mid-atmos
2882	Structure-Location, Significant Mappable	Kerr, Sorooshian			1/yr	30 m :: Land/R	:: Sfc
3060	Surface Water Area	Lau	m ²	100 ::	1/wk	30 m :: Land/L	N/A :: Sfc
3061	Surface Water Area	Lau	m ²	100 ::	1/wk	1 km :: Land/R	N/A :: Sfc
2804	Suspended-Solids Conc, Lake Water	Barron		25% ::		10 km :: Land/R-Lakes	N/A :: Sfc
2805	Suspended-Solids Conc, River Water	Barron		25% ::		10 km :: Land/R-Rivers	N/A :: Sfc
3333	Temperature	Dickinson				<0.5-1 deg :: G	

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
3428	Temperature	Harris	K	1 :: 0.5	2/day	10-50 km :: Ocean/R	1 km :: Atmos
1563	Temperature Profile	Abbott	C	10% :: 5%	1/(1-2 day)	25 km :: Ocean [Southern]	1 km :: Trop
1564	Temperature Profile	Barron	K	1 K :: 0.5K	1/day	100 km :: G	1 km :: Trop
1565	Temperature Profile	Barron	K	1 K :: 0.5K	1/day	10 km :: R	1 km :: Trop
1569	Temperature Profile	Bates	K	:: 1-2K		1.8 x .16 dg :: G	3 km :: 20-60 km
1570	Temperature Profile	Bates	K	K:2K>50km :: 3:1K>50km	2/day	4 x 4 dg :: G	1-1.5 km :: 10-80 km
1571	Temperature Profile	Bates	K	1.0K :: 0.4 K	2/day [d,n]	50 km :: G	1 km :: Atmos
1572	Temperature Profile	Groze	K	2 K :: 0.5 K	2/day	15 x 4 dg :: G	2 km :: Mid-atmos
1574	Temperature Profile	Hansen	K	0.3 C ::	1/wk	500 km :: G	:: Trop
1575	Temperature Profile	Hartmann	K	1 :: 1	1/day	10 km :: Ocean	1 km :: 0-15 km
1577	Temperature Profile	Kerr, Sorooshian	K	1 K :: 1 K	2/day	50 km :: Land	1 km :: Atmos
1578	Temperature Profile	Lau	K	1 K ::	1/day	100 km :: G	1 km :: Trop
1579	Temperature Profile	Liu	K	0.5 :: 0.5	1/day	25 km :: Ocean	0.5 km :: Trop
1580	Temperature Profile	Murakami	K	1% ::			
1581	Temperature Profile	Pyle	K	2 K :: 0.5 K	2/day	15 x 4 km :: G	2 km :: Strat
1582	Temperature Profile	Schoeberl	K	2 K :: 1 K	1/day	2 x 2 dg :: G	2 km :: Atmos
1583	Temperature Profile	Sellers	K	1 K ::	4/day	100 km ::	0.5 km :: Trop
1584	Temperature Profile	Srokosz	K	1K :: 0.1 K	2/day	10 km :: Ocean [South Atlan]	
1585	Temperature Profile	Wielicki	K	1 K :: 1 K	4/day [d,n]	1.25 dg :: G	1 km :: Atmos
1566	Temperature, Near_sfc	Barron	K	0.5 ::	1/day	100 km :: Ocean	N/A :: Sfc
1568	Temperature, Near_sfc	Barron	K	0.5 ::	1/day	<0.5-1 deg :: G	N/A :: Sfc
3334	Temperature, Near_sfc	Dickinson	K				
1629	Temperature, Near_sfc	Hansen	K	0.2 C ::	1/wk	500 km :: Land	:: Sfc
1630	Temperature, Near_sfc	Hansen	K	0.2 C ::	1/wk	500 km :: Ocean	:: Sfc
1631	Temperature, Near_sfc	Kerr, Sorooshian	K	1K :: 1K	2/day [d,n]	500 m :: Land/R	N/A :: Sfc
1627	Temperature, Near_sfc	Rothrock	K	2 K :: 2 K	1/day	100 km :: Polar	N/A :: Near_sfc
1632	Temperature, Near_sfc	Schmehl	C	10% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
1633	Temperature, Near_sfc	Schmehl	C	10% :: 1%	1/day, 1/wk	30 m :: 6 sites/L	N/A :: Sfc
3302	Temperature, PBL	Mouginis-Mark			1/day	30 m :: Land/R	N/A :: Plume cool
2823	Topographic Elevation, Land_sfc	Barron	m			10 km :: Land/R	30 m :: Sfc
2824	Topographic Elevation, Land_sfc	Barron	m			30 m :: Land/L	30 m :: Sfc
3495	Topographic Elevation, Land_sfc	Ciblar	m			30 m :: Canada/R	10 m :: Sfc
3410	Topographic Elevation, Land_sfc	Dickinson	m	5-10 m ::	once	Low_res :: Land	
2825	Topographic Elevation, Land_sfc	Dozier	m			20 m :: Land/L	:: Sfc
2844	Topographic Elevation, Land_sfc	Isacks	m	10 m :: 1 m		1 m :: Land/L	N/A :: Sfc
2826	Topographic Elevation, Land_sfc	Kerr, Sorooshian	m	0.1 :: 0.1	1/mission, 1/yeas	500 m :: Land	N/A :: Sfc
2827	Topographic Elevation, Land_sfc	Moore	m	50 m :: 50 m	1/mission		N/A :: Sfc
2847	Topographic Elevation, Land_sfc	Wielicki	km	1m ::			:: Sfc
2833	Topographic Elevation, Land_sfc, (DEM)	Isacks	m	200 m :: 200 m	1/mission	10 km :: Land	N/A :: Sfc
2838	Topographic Elevation, Land_sfc, (DEM)	Isacks	m	30 :: 10	1/mission	20 m :: Land/L	N/A :: Sfc
2839	Topographic Elevation, Land_sfc, (DEM)	Isacks	m	:: 120	1/mission	720 m :: Land/R	N/A :: Sfc
2834	Topographic Elevation, Land_sfc, (DEM)	Isacks	m	100 m :: 50 m	1/mission	50 m :: Land/R	N/A :: Sfc
2835	Topographic Elevation, Land_sfc, (DEM)	Kerr, Sorooshian	m	10 :: 10	1/yr	30 m :: Land/R	:: Sfc
2837	Topographic Elevation, Land_sfc, (DEM)	Lau	m	10 m :: 1 m	1/mission	10 m :: Land/L, R	N/A :: Sfc
3123	Topographic Elevation, Sea_sfc	Isacks	m	1 m :: 1 m	1/mission	point :: Land/L	N/A :: Sfc
3122	Topographic Elevation, Sea_sfc	Liu	cm	3 cm :: 3 cm		:: Ocean	N/A :: Sfc
		Murakami	m	0.01 ::			N/A :: Sfc
3107	Topographic Elevation, Sea_sfc	Srokosz	m	0.02m :: 0.01m	1/(10 day)	10 km :: Ocean/R	N/A :: Sfc

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
2830	Topographic Slope (Azimuth), Land_sfc	Kerr, Sorooshian	dg	10 :: 5	1/yr	30 m :: Land/R	:: Sfc
2845	Topographic Slope (Azimuth), Land_sfc	Kerr, Sorooshian	%	5 :: 5	1/yr	30 m :: Land/R	:: Sfc
1640	Torque, Friction	Bates	kg m ² /s ²	5% ::		:: G	:: Atmos
1374	Trace Gas Conc	Murakami	mix ratio	20% ::			N/A :: TOA
1642	Tropopause Height, Aerosol_located	Bates	m	75 m ::		200 km :: G	75 m :: Trop
2627	Vegetation Biomass	Riches, Batista	t/ha	20% :: 20%	1/secs	1 km :: Land/R	N/A :: Sfc
2628	Vegetation Biomass	Sellers					
2612	Vegetation Biomass, Dead	Barron	kg/ha	25% :: 15%	1/mission	30 m :: L	N/A :: Sfc
2613	Vegetation Biomass, Dead	Barron	kg/ha	25% :: 15%	1/mission	10 km :: R	N/A :: Sfc
2615	Vegetation Biomass, Green	Barron	kg/ha	25% :: 15%	1/mission	30 m :: L	N/A :: Sfc
2616	Vegetation Biomass, Green	Barron	kg/ha	25% :: 15%	1/mission	10 km :: R	N/A :: Sfc
3397	Vegetation Biomass, Green	Dickinson				<0.5-1 deg :: Land	
2617	Vegetation Biomass, Green	Isacks	kg/ha	40% :: 15%	1/mo	30 m :: Land/L	N/A :: Sfc
2618	Vegetation Biomass, Green	Moore	g/ha	40% :: 15%	1/(2-16 day)	500 m :: Land/R	:: Sfc
2619	Vegetation Biomass, Green	Moore	g/ha	40% :: 15%	1/(2-16 day)	30 m :: Land/L	:: Sfc
2624	Vegetation Biomass, Sub_sfc	Kerr, Sorooshian	kg/m ²		1/(1-3 yr) [few yr]	1120 m :: Land/R	:: Sub_sfc
2630	Vegetation Biome Area	Kerr, Sorooshian	km ²	5% :: 5%	1/secs	:: Land/R	N/A :: Sfc
2647	Vegetation Cellulose Conc	Moore	%	20% :: 20%	1/(16 day)	30 m :: Land/L	
2649	Vegetation Chlorophyll Conc	Moore	g/ha	20% :: 10%	1/day, 1/wk	30 m :: Land/L	
2650	Vegetation Chlorophyll Conc	Moore	g/ha	20% :: 10%	1/day, 1/wk	1 km :: Land/R	
2651	Vegetation Chlorophyll Conc	Schmell	kg/ha	10% :: 1%	1/wk	30 m :: 6 sites/L	N/A :: Sfc
2652	Vegetation Chlorophyll Conc	Schmell	kg/ha	10% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
2740	Vegetation Cover	Sellers			1/(1-4 day)	100 km ::	:: Sfc
2634	Vegetation Density	Kerr, Sorooshian	%	1 :: 1	1/day	60 m :: Land/R	:: Sfc
1989	Vegetation Evapotrans	Bates	mm/day			500 m :: Land	N/A :: Sfc
1990	Vegetation Evapotrans	Bates	m/yr	0.02 ::			
3497	Vegetation Evapotrans	Cihlar	cm	20% :: 5-20%	1 day, 1 wk	500 m :: Canada/R	N/A :: Sfc
3351	Vegetation Evapotrans	Dickinson				High_res :: Land	
3352	Vegetation Evapotrans	Dickinson				Med_res :: Land	
1788	Vegetation Evapotrans	Lau	W/m ² ?	10% :: 10%	1/day	1 km :: Land/L	N/A :: Sfc
3057	Vegetation Evapotrans	Moore	%	20% :: 20%	1/day, 1/wk	500 m :: R	:: Sfc
3058	Vegetation Evapotrans	Moore	%	20% :: 20%	1/day, 1/wk	30 m :: L	:: Sfc
1991	Vegetation Evapotrans	Murakami	m/yr	0.02 ::			
1790	Vegetation Evapotrans	Schmell	cm ?	20% :: 5%	1/wk	30 m :: 6 sites/L	N/A :: Sfc
1789	Vegetation Evapotrans	Simard				:: Canada/R	N/A :: Sfc
1800	Vegetation Evapotrans, Actual, (AET)	Bates	mm/day	0.5 :: 1	1/day	500 m :: Land	N/A :: Sfc
1801	Vegetation Evapotrans, Actual, (AET)	Lau	W/m ² ?	10% :: 10%	1/day	1 km :: Land/L	N/A :: Sfc
1802	Vegetation Evapotrans, Actual, (AET)	Lau	W/m ² ?	10% :: 10%	1/day	10 km :: Land/R	N/A :: Sfc
1804	Vegetation Evapotrans, Potential	Lau	W/m ² ?	10% :: 10%	1/day	10 km :: Land/R	N/A :: Sfc
2715	Vegetation Extent	Barron	N/A	5 ? :: 5 ?	1/yr	30 m :: Land/L	N/A :: Sfc
2716	Vegetation Extent	Barron	N/A	5 ? :: 5 ?	1/yr	10 km :: Land/R	N/A :: Sfc
2717	Vegetation Extent	Barron	N/A	5 ? :: 5 ?	1/yr	100 km :: Land	N/A :: Sfc
3400	Vegetation Extent	Dickinson				High_res :: Land	
3401	Vegetation Extent	Dickinson				Med-low_res :: Land	:: Sfc
2718	Vegetation Extent	Hansen		5% ::	1/wk	500 km :: Land	N/A :: Sfc
2719	Vegetation Extent	Isacks			1/secs	1 km :: Land/R	:: Sfc
2721	Vegetation Extent	Moore	ha	15% :: 15%	1/yr	1 km :: Land	:: Sfc

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
2720	Vegetation Extent	Simard		10% ::			N/A :: Sfc
3402	Vegetation Height	Dickinson				Med-low_res :: Land	
2636	Vegetation Height	Kerr, Sorooshian	m	10% :: 10%	1/secs	30 m :: Land/R	:: Sfc
2742	Vegetation Index	Hansen		5% ::	1/wk	500 km :: Land	:: Sfc
2743	Vegetation Index	Isacks		1 :: 1	1/mo	240-500 m :: Land/R	N/A :: Sfc
2744	Vegetation Index	Isacks	%	1 :: 0.5	1/mo	30-60 m :: Land/L	N/A :: Sfc
2745	Vegetation Index	Murakami				:: Land	N/A :: Sfc
2673	Vegetation Index, Leaf Area, (LAI)	Barron		0.5 :: 0.2	1/day	100 km :: Land	N/A :: Sfc
2674	Vegetation Index, Leaf Area, (LAI)	Barron		0.5 :: 0.2	1/day	10 km :: Land/R	N/A :: Sfc
2675	Vegetation Index, Leaf Area, (LAI)	Barron		0.5 :: 0.2	1/day	30 m :: Land/L	N/A :: Sfc
2676	Vegetation Index, Leaf Area, (LAI)	Bates			1/mo	60 m :: Land	N/A :: Sfc
3499	Vegetation Index, Leaf Area, (LAI)	Cihlar	area fraction		1 wk	1 km :: Canada/R	N/A :: Sfc
3406	Vegetation Index, Leaf Area, (LAI)	Dickinson	%	10% :: 1%		Low_res :: Land	
2677	Vegetation Index, Leaf Area, (LAI)	Lau	%	10% :: 10%	1/secs	1 km :: Land/R	N/A :: Sfc
2678	Vegetation Index, Leaf Area, (LAI)	Schimel	%	10% :: 1%	1/wk, 1/mo	30 m :: 6 sites/L	N/A :: Sfc
2679	Vegetation Index, Leaf Area, (LAI)	Schimel	%	10% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
2760	Vegetation Leaf Water Content	Moore	g/cm^3	20% :: 20%	1/day, 1/wk	30 m :: Land/L	:: Sfc
2684	Vegetation Lignin Conc	Moore	%	20% :: 20%	1/(16 day)	30 m :: Land/L	
2685	Vegetation Lignin Conc	Schimel	%	20% :: 1%	1/secs	30 m :: 6 sites/L	N/A :: Sfc
2686	Vegetation Lignin Conc	Schimel	cm^3/cm^3	20% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
2950	Vegetation Moisture, Root-zone	Barron	cm^3/cm^3	0.1 :: 0.05	1/day	100 km :: Land	N/A :: Sub_sfc
2951	Vegetation Moisture, Root-zone	Barron	cm^3/cm^3	0.1 :: 0.05	1/day	10 km :: Land/R	N/A :: Sfc
2952	Vegetation Moisture, Root-zone	Barron	cm^3/cm^3	0.1 :: 0.05	1/day	30 m :: Land/L	N/A :: Sub_sfc
3501	Vegetation Moisture, Root-zone	Cihlar	m	10% :: 20%	1 wk (in grow. seas)	1 km :: Canada/R	N/A :: Sub_sfc
2708	Vegetation Moisture, Root-zone	Dickinson				<0.5-1 deg :: Land	
2953	Vegetation Moisture, Root-zone	Richey, Batista	m	[20%], 10% :: [10%], 20%	1/secs	1 km :: Land/R	N/A :: Sfc
2688	Vegetation N Conc	Simard		10% ::		:: Canada/R	N/A :: Sfc
2689	Vegetation N Conc	Moore	%	20% :: 20%	1/(16 day)	1 km :: Land/R	
2690	Vegetation N Conc	Moore	%	20% :: 20%	1/(16 day)	30 m :: Land/L	
2691	Vegetation N Conc	Schimel	%	20% :: 1%	1/secs	30 m :: 6 sites/L	N/A :: Sfc
2693	Vegetation Physiography	Schimel	m	20% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
2698	Vegetation Production, Net Primary, (NPP)	Richey, Batista		10% :: 10%	1/mo	1 km :: Land/R	N/A :: Sfc
3500	Vegetation Reflectance Factor	Schimel	kg/ha	20% :: 5%	1/yr	500 m :: 6 sites/L	N/A :: Sfc
3496	Vegetation Reflectance, Bi-directional, (BRDF)	Cihlar	dimensionless	0.05 :: 0.001	1 day	250-1000 m :: Canada/R	N/A :: Sfc
3371	Vegetation Reflectance, Bi-directional, (BRDF)	Cihlar		0.05 :: 0.001	1 wk (for 1 yr)	:: Canada/R	N/A :: Sfc
2046	Vegetation Reflectance, Bi-directional, (BRDF)	Dickinson				<0.5-1 deg :: Land	
3403	Vegetation Rooting Depth	Kerr, Sorooshian	N/A	10% :: 10%	1/secs	N/A :: Land	N/A :: Sfc
2707	Vegetation Rooting Depth	Dickinson	m			<0.5-1 deg :: Land	
3404	Vegetation Roughness	Kerr, Sorooshian		20% :: 20%	1/yr	30 m :: Land/R	
2638	Vegetation Spatial Density	Dickinson	M/km^2			Med-low_res :: Land	:: Sfc
2709	Vegetation Stomatal Resistance	Kerr, Sorooshian		20% :: 10%		60 m :: Land/R	
2639	Vegetation Structure	Kerr, Sorooshian			1/secs	30 m :: Land/R	N/A :: Sfc
2640	Vegetation Structure	Barron			1/secs	30 m :: Land/L	N/A :: Sfc
3502	Vegetation Structure	Cihlar	geometric			10 km :: Land/R	N/A :: Sfc
2726	Vegetation Structure	Richey, Batista	%		1/secs	1 km :: Canada/R	N/A :: Sfc
2641	Vegetation Structure	Schimel	geometric	:: 5%	1/yr	1 km :: Land/R	N/A :: Sfc
						30 m :: 6 sites/L	N/A :: Sfc

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
2642	Vegetation Structure	Schimel	geometric	:: 5%	1/yr	500 m :: 6 sites/L	N/A :: Sfc
2643	Vegetation Structure	Schimel	geometric	:: 5%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
3503	Vegetation Temperature	Cihlar	K	0.5 K :: 1.0 K	1 day	250-1000 m :: Canada/R	N/A :: Sfc
3394	Vegetation Temperature	Dickinson				<0.5-1 deg :: Land	
2456	Vegetation Temperature	Kerr, Sorooshian	K	0.5K :: 0.5K	2/day [d,n]	500 m :: Land/R	:: Sfc
2535	Vegetation Temperature	Moore	K				:: Sfc
2728	Vegetation Type	Barron	N/A	5 % :: 5 %	1/yr	10 km :: Land/R	N/A :: Sfc
2729	Vegetation Type	Barron	N/A	5 % :: 5 %	1/yr	30 m :: Land/L	N/A :: Sfc
2730	Vegetation Type	Barron	N/A	5 % :: 5 %	1/yr	100 km :: Land	N/A :: Sfc
3504	Vegetation Type	Cihlar	ha	15% :: 15%	once	100 m :: Canada/R	N/A :: Sfc
3405	Vegetation Type	Dickinson				<0.5-1 deg :: Land	
2731	Vegetation Type	Hansen		5% ::	1/wk	500 km :: Land	:: Sfc
2732	Vegetation Type	Isacks			1/dec	1 km :: Land/R	N/A :: Sfc
2733	Vegetation Type	Kerr, Sorooshian	class		1/dec	30 m :: Land/R	:: Sfc
2734	Vegetation Type	Lau	species		1/dec	30 m :: Land/L	N/A :: Sfc
2736	Vegetation Type	Moore	ha	15% :: 15%	1/yr	1 km :: Land	:: Sfc
2739	Vegetation Type Boundaries	Barron	m	30 m ::	1/3 mo	30 m :: Land/L	N/A :: Sfc
2762	Vegetation Water Content	Moore	g/cm ³	20% :: 20%	1/day, 1/wk	30 m :: Land/L	:: Sfc
2758	Vegetation Water Content, Integrated	Kerr, Sorooshian	%	20% :: 20%	2/wk	500 m :: Land/R	N/A :: Sfc
3407	Vegetation Water Potential	Dickinson				Low res :: Land	
3269	Volcano Deformation	Mouginis-Mark	cm	1 cm(ver) ::	1/day	cm [?] :: [30 km ² /10]	N/A :: Sfc
3274	Volcano Elevation Change	Mouginis-Mark	cm	1-5 (ver) ::	2/day [d,n]	30 m :: Land/L	N/A :: Sfc
3278	Volcano Elevation Change	Mouginis-Mark	m	10 m(ver) ::	1/event	30 m :: Land/L	N/A :: Sfc
3276	Volcano Elevation, Reference	Mouginis-Mark	m	10 m(ver) ::	1/mision	30 m :: Land/L	N/A :: Sfc
3284	Volcano Morphology	Mouginis-Mark	m		4/yr	30 m :: Land/L	N/A :: Sfc
3287	Volcano Roughness	Mouginis-Mark	cm	3-24 cm ::	1/yr	30 m :: Land/L	N/A :: Sfc
3290	Volcano Temperature, Eruption Spike	Mouginis-Mark	C	10 C ::	[near-real time ?]	1 km :: G	N/A :: Sfc
3295	Volcano Temperature-Change	Mouginis-Mark	C/yr	1 C ::	1/yr	30 m :: Land/L	N/A :: Sfc
3408	Wetlands Extent	Dickinson				Low res :: Land	
2764	Wetlands Extent	Hansen		5% ::	1/wk	500 km :: Land	:: Sfc
1702	Wind Direction	Liu	dg	10 dg :: 10 dg	1/day	25 km :: Ocean	N/A :: Sfc
1703	Wind Direction	Srokosz	dg	10 dg :: 1 dg	1/day	25 km :: Ocean [South Atlan]	
1706	Wind Flux(Draw)	Kerr, Sorooshian	km/day		1/day	25 km :: Land	10 km :: Trop
1712	Wind Speed	Lau	m/s	1 m/s :: 2%	2/day	100 km :: G	1 km :: Trop
1739	Wind Speed	Lau	m/s	0.5 m/s :: 2%	2/day	100 km :: G	N/A :: Sfc
1714	Wind Speed	Pyle	m/s	5 m/s :: 5 m/s	2/day	15 x 4 km :: G	2 km :: Strat
1715	Wind Speed	Sellers	m/s	1 m/s ::	4/day	100 km ::	0.5 km :: Trop
3339	Wind Speed, Land_afc	Dickinson				<0.5-1 deg :: Land	
1711	Wind Speed, Land_afc	Kerr, Sorooshian	m/s	5 m/s :: 5 m/s	1/hr	25 km :: Land/R	N/A :: Sfc
1718	Wind Speed, PBL	Lau	m/s	20% :: 10%	1/hr	30 m :: Land/L	N/A :: PBL
1707	Wind Speed, Sea_afc	Abbott	m/s	10% :: 5%	1/(10-20 day)	25 km :: Ocean [Southern]	N/A :: Sfc
1708	Wind Speed, Sea_afc	Abbott	m/s	10% :: 5%	1/(1-2 day)	25 km :: Ocean [Southern]	N/A :: Sfc
1709	Wind Speed, Sea_afc	Bates	m/s		2/day [d,n]	50 km :: Ocean	N/A :: Sfc
1710	Wind Speed, Sea_afc	Brewer	m/s	15% :: 5%	1/day, 1/dec	25 km :: Ocean	N/A :: Sfc
3435	Wind Speed, Sea_afc	Harris	m/s	5-10% :: 2-10%	1-10 days	1-25 km :: Ocean/R	N/A :: Sfc
1713	Wind Speed, Sea_afc	Liu	m/s	1 :: 1	1/day	25 km :: Ocean	N/A :: Sfc
1716	Wind Speed, Sea_afc	Srokosz	m/s	1 m/s :: 0.1 m/s	1/day	25 km :: Ocean [South Atlan]	N/A :: Sfc

Appendix K: IDS Input Requirements Listed by Product Name

Prod #	Product Name	Investigator	Units	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Coverage	Vertical Resol :: Coverage
1717	Wind Speed, Sea_gfc	Tapley	m/s	1 m/s ::	4/day	50 km :: Ocean	N/A :: Sfc
1742	Wind Stress	Bates				:: Ocean	:: Sfc
1743	Wind Stress	Lau	N/m ²	0.01 ::		:: Ocean	N/A :: Sfc
1744	Wind Stress	Murakami	N/m ²	0.01 ::		:: Ocean	N/A :: Sfc
1745	Wind Stress	Tapley	N/m ²	10% ::	4/day		N/A :: Sfc
1754	Wind Velocity	Abbott	m/s dg	10%, <20dg :: 5%	1/(1-2 day)	50 km :: Ocean	N/A :: Sfc
1650	Wind Velocity	Barron	m/s dg	1 m/s :: 0.5 m/s	1/day	25 km :: Ocean [Southern]	1 km :: Trop
1651	Wind Velocity	Barron	m/s dg	1 m/s :: 0.5 m/s	1/day	30 m :: L	1 km :: 0-12 km
1652	Wind Velocity	Barron	m/s dg	1 m/s :: 0.5 m/s	1/day	10 km :: R	1 km :: 0-12 km
1659	Wind Velocity	Bates	m/s dg	1 m/s :: 0.5 m/s	1/day	100 km :: L	1 km :: 0-12 km
1660	Wind Velocity	Bates	m/s dg	:: <2 m/s	1/(12 min)	3.1 x 1.8 dg :: G	3 km :: 38-60 km
1661	Wind Velocity	Bates	m/s dg	:: <5 m/s	1/(12 min)	1.8 x 3.1 dg :: G	3 km :: 20-38 km
3335	Wind Velocity	Dickinson	m/s dg	1-5 m/s ::	2/day	100 km :: G	1 km :: Atmos
1662	Wind Velocity	Grose	m/s dg	5 m/s, 10dg :: 5 m/s, 5dg		<0.5-1 deg :: G	
3433	Wind Velocity	Harris	m/s dg	10%, 20% :: 5%, 10%	2/day	15 x 4 dg :: G	2 km :: Mid-atmos
3434	Wind Velocity	Harris	m/s dg	7%, 14% :: 5%, 10%	1 day	25 km :: Ocean/R	N/A :: Sfc
1665	Wind Velocity	Hartmann	m/s dg	4 m/s :: 4 m/s	2 days	100 km :: Ocean/R	N/A :: Sfc
1666	Wind Velocity	Isacks	m/s dg	:: 0.4	1/day	100 km :: G	0-15 km
1667	Wind Velocity	Liu	m/s dg	1 :: 1	1/wk	100 km :: Land/R	:: Trop
1668	Wind Velocity	Murakami	m/s dg	10% :: TBD	1/day	25 km :: Ocean	:: Trop
1671	Wind Velocity	Schoeberl	m/s dg	2 m/s :: 3 m/s	1/day	200 x 200 km :: G	2 km :: Strat
1672	Wind Velocity	Srokosz	m/s dg	2 m/s :: 1 m/s	1/day	25 km :: Ocean [South Atlan]	500 m ::
1673	Wind Velocity	Wielicki	m/s dg	5 m/s :: 2 m/s	4/day (d.n)	1.25 dg :: G	1 km :: Atmos
3336	Wind Velocity, Divergent Horizontal	Dickinson				<0.5-1 deg :: G	
1684	Wind Velocity, Friction	Srokosz	m/s dg	5%, 5 dg :: 0.1 m/s, 1 dg	1/day	25 km :: Ocean [South Atlan]	N/A :: Sfc
1685	Wind Velocity, Geostrophic	Bates	m/s	2 m/s ::	2/day	4 x 4 dg :: G	1-1.5 km :: Atmos
2382	Wind Velocity, LAWS Line-of-sight (Level-1B)	Bates					
1654	Wind Velocity, Land_gfc	Barron	m/s dg	1 :: 1	1/day	100 km :: Land	N/A :: Sfc
1655	Wind Velocity, Land_gfc	Barron	m/s dg	1 :: 1	1/day	30 m :: Land/L	N/A :: Sfc
1656	Wind Velocity, Land_gfc	Barron	m/s dg	1 :: 1	1/day	10 km :: Land/R	N/A :: Sfc
3337	Wind Velocity, Rotational Horizontal	Dickinson				<0.5-1 deg :: G	
1753	Wind Velocity, Sea_gfc	Abbott	m/s dg	10%, <20dg :: 5%	1/(1-2 day)	25 km :: Ocean [Southern]	N/A :: Sfc
1653	Wind Velocity, Sea_gfc	Barron	m/s dg	1 m/s, 7 :: 1 m/s, 7	1/day	10 km :: Ocean/R	N/A :: Sfc
1657	Wind Velocity, Sea_gfc	Barron	m/s dg	1 m/s, 7 :: 1 m/s, 7	1/day	100 km :: Ocean	N/A :: Sfc
1658	Wind Velocity, Sea_gfc	Bates	m/s dg	:: 10%; 20 dg		25 km :: Ocean	N/A :: Sfc
3338	Wind Velocity, Sea_gfc	Dickinson				<0.5-1 deg :: Ocean	N/A :: Near_sfc
1663	Wind Velocity, Sea_gfc	Hansen	m/s dg	10% ::	1/wk	500 km :: Ocean	:: Sfc
1664	Wind Velocity, Sea_gfc	Hartmann	m/s dg	2 m/s :: 2 m/s	1/day	50 km :: Ocean	N/A :: Sfc
1669	Wind Velocity, Sea_gfc	Rohrock	m/s dg	2 m/s :: 2 m/s	1/day	100 km :: Polar	N/A :: Near_sfc
1670	Wind Velocity, Sea_gfc	Rohrock	m/s dg	2 m/s :: 2 m/s	1/day	25 km :: Polar	N/A :: Sfc
3258	X-Ray Energy Spectra	Schoeberl	photon/cm ² /s/A	20% :: 15%	1/day	5 dg/LAT :: G	N/A :: 15-110 km
3421	X-Ray Images	Dickinson				<0.5-1 deg :: G	

**IDS Input Requirements
Listed by
IDS Investigator**

Appendix L

Science Processing Support Office (SPSO)

Goddard Space Flight Center

August 1992

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Appendix L: IDS Input Requirements Listed by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product								
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match Type	Accuracy	Temporal Resolution	Horizontal Resol. :: Cover.	Vertical Resol. :: Cover.
Abbott	Sea_Ice Edge	3156									
			MODIS	AM,PM	Salomonson	3153*	BM			25 km :: Ocean/Cryo	N/A :: Sfc
			MIMR	PM	TBD	3611	AM:			10 km :: Ocean/Cryo	N/A :: Sfc
			ASTER	AM2	Welch	3152	AM			22 km :: Ocean/Cryo	N/A :: Sfc

The "best" and "alternative" matches were selected by comparing the stated IDS requirements with the output product specifications for these fields.

These output products have been identified by the SPSO as "best" or "alternative" matches for the IDS required input product #3156.

An asterisk (*) indicates a post-launch data product.

Match Types are described in Table A-4.

Coverage keywords are described in Table A-3. Acronyms and abbreviations are described in Table A-1.

Legend for Appendix L: IDS Input Requirements Listed by IDS Investigator

This table lists the IDS input requirements that have been matched to proposed EOS output products.

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match		
Abbott	Cloud Liq_water Total Column	1918	CERES	TRM,AM,PM	Berkstrom	1900	BM	25 km :: Ocean [Southern]	Column :: Trop
			AIRS	PM	Rosenkranz	1908*	AM	25 km :: G	Column :: Atmos
			MIMR	PM	TBD	3598	AM	50 km :: G	N/A :: Cloud
								22 km :: Ocean	N/A :: Trop
Abbott	Humidity Profile	1803	AIRS	PM	Chechin, Fleming,	1828	BM	25 km :: Ocean [Southern]	1 km :: Trop
								15 x 50 :: 50 x 50 km :: G	2 km :: Atmos
Abbott	Irradiance, Solar	2269	MODIS	AM,PM	Gordon	2267	BM	1-4 km :: Ocean [Southern]	N/A :: Sfc
			MODIS	AM,PM	Terre	2268*	BM	1 km :: Ocean	N/A :: Sfc
Abbott	Ocean Productivity, Primary, Total Column	2597	MODIS	AM,PM	Abbott	2602*	BM	1-4 km :: Ocean [Southern]	N/A :: Atmos
								1 km :: Ocean-IR, L	N/A :: TOO
Abbott	Ocean Water Attenuation Coef	3204	MODIS	AM,PM	Clark	2031*	BM	1-4 km :: Ocean [Southern]	N/A :: TOO
			MODIS	AM,PM	Gordon, Clark	3200	AM	1 km :: Ocean-IR, L	N/A :: TOO
Abbott	Ocean Wave Height, Significant	3130	ALT	ALT	Fu	3129	AM	10-20 km :: Ocean [Southern]	N/A :: Sfc
								7 km :: Ocean	N/A :: Sfc
Abbott	Organic Matter Conc, Dissolved	2579	MODIS	AM,PM	Parlow et al	2583	BM	1-4 km :: Ocean [Southern]	N/A :: TOO
			MODIS	AM,PM	Carter	2581*	BM	1 km :: Ocean [Southern] R, L	N/A :: TOO
Abbott	Phytoplankton Backscatter	3209	MODIS	AM,PM	Gordon	2555*	BM	1-4 km :: Ocean	N/A :: TOO
								1 km :: Ocean/R	N/A :: TOO
Abbott	Pigment Conc, Phycoerythrin	2584	HIRIS	AM2	Davis, Melack	3072	AM-	1-4 km :: Ocean [Southern]	N/A :: TOO
								60-90 m :: Ocean-IR, L	N/A :: TOO
Abbott	Pigment Conc, Phytoplankton	2587	MISR	AM	Diner	2589	BM	1-4 km :: Ocean [Southern]	N/A :: TOO
			MODIS	AM,PM	Gordon, Clark	2592	BM	1-4 km :: Ocean [Southern]	N/A :: TOO
			MISR	AM	Diner	2588*	AM	1 km :: Ocean/R, L	N/A :: TOO
			MODIS	AM,PM	Gordon, Clark	2591	AM	240 m :: Ocean/R	N/A :: TOO
Abbott	Precipitable Water	1858	MODIS	AM,PM	Menzel	1875	BM	25 km :: Ocean [Southern]	Column :: Trop
			MIMR	PM	TBD	3596	AM	5 km :: G	N/A :: Atmos
			MODIS	AM,PM	Kaufman, Tere	1874	AM	22 km :: Ocean	Column :: Trop
			AIRS	PM	Rosenkranz	3693	AM	5 km :: Land	N/A :: Atmos
Abbott	Precipitation Rate, Rain	1972	AIRS	PM	Chechin, Fleming,	1869	AM	50 km :: G	N/A :: Trop
			MIMR	PM	TBD	3600	BM	25 km :: Ocean [Southern]	N/A :: Trop
								22 km :: Global	N/A :: Sfc
								25 km :: Ocean/Cryo	N/A :: Sfc
Abbott	Sea_Ice Edge	3156	MODIS	AM,PM	Salomonson	3153	BM	10 km :: Ocean/Cryo	N/A :: Sfc
			MIMR	PM	TBD	3613	BM	22 km :: Ocean/Cryo	N/A :: Sfc
			MODIS	AM,PM	Salomonson	3154	AM	1 km :: Ocean/Cryo, R	N/A :: Sfc
			MIMR	PM	TBD	3611	AM	22 km :: Ocean/Cryo	N/A :: Sfc
Abbott	Sea_Level Height	3103	ASTER	AM, I	Welch	3152	AM	90 m :: Ocean/Cryo	N/A :: Sfc
								10-20 km :: Ocean [Southern]	N/A :: Sfc
Abbott	Sea_sfc Temperature (SST)	2504	ALT	ALT	Fu	3112	BM	7 km :: Ocean	N/A :: Sfc
			ALT	ALT	Fu	3108	BM	25 km :: Ocean	N/A :: Sfc
Abbott			MODIS	AM,PM	Brown	2527	BM	1-4 km :: Ocean [Southern]	N/A :: Sfc
								1 km :: Ocean/L	N/A :: Sfc

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product					Accuracy	Temporal	Horizontal	Vertical	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	
Abbott	Sea_sfc Temperature (SST)	2504	MODIS	AM,PM	Brown	2529	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	4 km :: Ocean/R,L	N/A :: Sfc	
			MODIS	AM,PM	Brown, Barton	2530	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	4 km :: Ocean/R,L	N/A :: Sfc	
			AIRS	PM	Chedin, Fleming,	2523*	AM	0.5-1 K :: 0.4-0.5 K	2/day [d,n]	50 km :: Ocean	N/A :: Sfc	
Abbott	Sea_sfc Temperature (SST)	2505						1 K :: 0.1 K	(1-2)/day	50 km :: Ocean [Southern]	N/A :: Sfc	
			MODIS	AM,PM	Brown, Barton	2532	BM	0.3-0.4K :: 0.1-0.6K	1/day, 1/wk, 1/mo	50 km :: Ocean	N/A :: Sfc	
			AIRS	PM	Chedin, Fleming,	2523*	BM	0.5-1 K :: 0.4-0.5 K	2/day [d,n]	50 km :: Ocean	N/A :: Sfc	
			MODIS	AM,PM	Brown	2528	AM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G,L,R	N/A :: Sfc	
			MODIS	AM,PM	Brown, Barton	2531	AM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G,L,R	N/A :: Sfc	
Abbott	Temperature Profile	1563	MIMR	PM	TBD	3603	AM			60 km :: Ocean	N/A :: Sfc	
Abbott	Wind Speed, Sea_sfc	1707						10% :: 5%	1/(1-2 day)	25 km :: Ocean [Southern]	1 km :: Trop	
			AIRS	PM	Chedin, Fleming,	1588	BM	1.0 K :: 0.4 K	2/day [d,n]	15 x 50-50 x 50 km :: G	1, 2 km :: Atmos	
								10% :: 5%	1/(10-20 day)	25 km :: Ocean [Southern]	N/A :: Sfc	
			ALT	ALT	Fu	1735	BM	2 m/s ::	7 km :: Ocean	N/A :: Sfc		
			AIRS	PM	Aumann	1718*	BM		1/day	50 km :: Ocean	N/A :: Sfc	
Abbott	Wind Speed, Sea_sfc	1708	MIMR	PM	TBD	3594	AM			39 km :: Ocean	N/A :: Sfc	
			MIMR	PM	TBD	3595	AM		1 mo	1 dg :: Ocean	N/A :: Sfc	
								10% :: 5%	1/(1-2 day)	25 km :: Ocean [Southern]	N/A :: Sfc	
			ALT	ALT	Fu	1735	BM	2 m/s ::	7 km :: Ocean	N/A :: Sfc		
			AIRS	PM	Aumann	1718*	BM		1/day	50 km :: Ocean	N/A :: Sfc	
Abbott	Wind Velocity, Sea_sfc	1753	MIMR	PM	TBD	3594	AM			39 km :: Ocean	N/A :: Sfc	
								10%, <20dg :: 5%	1/(1-2 day)	25 km :: Ocean [Southern]	N/A :: Sfc	
			STKSCAT	CHDM	Frellich	1680	BM	:: 10%, 16 deg	1/(2 day)	25 km :: Ocean	N/A :: Near Sfc	
								1% :: 1%	1/wk	10 km :: G	N/A :: Sfc	
			MODIS	AM,PM	Torre, Muller	2016*	BM	15% :: 5-8%	1/day, 1/wk	10 km :: G,R	N/A :: Sfc	
Barron	Albedo, Land_sfc	2013	AIRS	PM	Gautier 77	2000*	AM		1/day	50 km :: Land	N/A :: Sfc	
			MODIS	AM,PM	Muller, Strahler,	3665*	AM	5% :: 3%	1/day	1 km :: Land/R	N/A :: Sfc	
			MODIS	AM,PM	Muller, Strahler,	3666*	AM	5% :: 3%	1/day	1 km :: Land/R	N/A :: Sfc	
								3 ::	1/day	100 km :: G	N/A :: TOA	
			MODIS	AM,PM	Muller, Strahler,	3667*	BM	5% :: 3%	1/day	1 km :: Land/R	N/A :: TOA	
Barron	Albedo, TOA	2023	MODIS	AM,PM	Muller, Strahler	2001	AM	10% :: 5%	1/(3-8 day)	1 km :: Land/R	N/A :: TOA	
			MISR	AM	Diner	2011	AM	<+0.03 :: 0.01	1/(5-16 day) [d]	1.92 km :: G	N/A :: TOA	
								5 :: 5	1/day	100 km :: G	N/A :: Cloud	
			MODIS	AM,PM	King	2082	BM	10% :: 5%	1/day	1 dg :: G	N/A :: Cloud	
			CERES	TRM,AM,PM	Bartstrom	2088	BM	5% :: 2%	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	N/A :: Atmos	
Barron	Cloud Cover	2049	AIRS	PM	Chashine, Chedin,	2062	BM	0.05 :: 0.025	2/day [d,n]	15 x 15-50 x 50 km :: G	N/A :: Cloud	
			CERES	TRM,AM,PM	Bartstrom	2087	AM	5% :: 2%	1/(6 hr)	1.25 x 1.25 dg :: G	N/A :: Atmos	
			CERES	TRM,AM,PM	Bartstrom	2086	AM	5% :: 2%	6/day [d,n]	25 km :: G	N/A :: Atmos	
			MODIS	AM,PM	King	2081	AM	10% :: 5%	2/day [d,n], 1/mo	5 km :: G	N/A :: Cloud	
			GLRS-A	ALT	Spinlime	2078	AM	1% ::	1/(2-16 day)	10-200 km :: G	N/A ::	
Barron	Cloud Cover	2050						5 :: 5	1/day	10 km :: R	N/A :: Cloud	
			MODIS	AM,PM	King	2081	BM	10% :: 5%	2/day [d,n], 1/mo	5 km :: G	N/A :: Cloud	
			GLRS-A	ALT	Spinlime	2078	AM	1% ::	1/(2-16 day)	10-200 km :: G	N/A ::	
								5 :: 5	1/day	30 m :: L	N/A :: Cloud	
			HIRIS	AM2	Welch	2079	BM	1% :: 0.5%	1/(1-3 min), 1/(2-16 day)	30 m :: L	:: Cloud	
Barron	Cloud Cover	2051	ASTER	AM1	Welch	2080	AM	3% :: 3%	1/(16 day)	90 m :: L	N/A :: Cloud	
								100 m :: 50 m	1/day	100 km :: G	100 m :: Cloud	
								1.0 km :: 0.1 km	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	0.1 km :: Atmos	
			CERES	TRM,AM,PM	Bartstrom	1395	BM					

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product				Accuracy			Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel							
Barron	Cloud Height, Base	1380	CERES	TRM,AM,PM	Barkstrom	1393	BM	1.0 km :: 0.1 km		6/day [d,n]		25 km :: G		0.1 km :: Atmos	
Barron	Cloud Height, Base	1381						100 m :: 50 m		1/day		10 km :: R		100 m :: Cloud	
Barron	Cloud Height, Base	1382	CERES	TRM,AM,PM	Barkstrom	1393	BM	1.0 km :: 0.1 km		6/day [d,n]		25 km :: G		0.1 km :: Atmos	
Barron	Cloud Height, Top	1412	HIRIS	AM2	Welch	1390	BM	100 m :: 50 m		1/day		30 m :: L		100 m :: Cloud	
Barron	Cloud Height, Top	1412	ASTER	AM1	Welch	1391	AM	50 m :: 50 m		1/2-16 day		30 m :: L		N/A :: Cloud	
Barron	Cloud Height, Top	1412	CERES	TRM,AM,PM	Barkstrom	1430	BM	100 m :: 25 m		1/day		100 km :: G		100 m :: Cloud	
Barron	Cloud Height, Top	1412	AIRS	PM	Chahine, Chedin,	1423*	AM	1.0 km :: 0.1 km		1/day [Avg], 1/mo [Avg]		1.25 x 1.25 dg :: G		0.1 km :: Atmos	
Barron	Cloud Height, Top	1412	MODIS	AM,PM	Menzel	1529	AM	0.5 km :: 0.25 km		2/day [d,n]		15 x 15 - 50 x 50 km :: G		N/A :: Cloud	
Barron	Cloud Height, Top	1412	EOSP	AERO,AM2	Travis	1530	AM	50 mb :: 20 mb		1/day, 1/mo		1 dg :: G		N/A :: Cloud	
Barron	Cloud Height, Top	1413	MISR	AM	Diner	1432*	AM	30 mb :: 30 mb		1/day [d]		40 km :: G		30 mb :: Cloud	
Barron	Cloud Height, Top	1413	MISR	AM	Diner	1433*	AM	100 m :: 100 m		1/5-16 day [d]		500 m :: R		N/A :: Trop	
Barron	Cloud Height, Top	1414	HIRIS	AM2	Welch, Goetz	1426	BM	100 m :: 25 m		1/day		10 km :: R		100 m :: Cloud	
Barron	Cloud Height, Top	1414	GLRS-A	AL,T	Spinthorne et al	1425	AM	500 m :: 250 m		1/2-16 day		25 km :: G		0.1 km :: Atmos	
Barron	Cloud Height, Top	1414	ASTER	AM1	Welch	1427	AM	75 m ::		1/2-16 day		5 km :: G		N/A :: Cloud	
Barron	Cloud Height, Top	1902	HIRIS	PM	Rosenbranz	1908*	BM	300 m :: 300 m		1/16 day		90 m :: L		N/A :: Cloud	
Barron	Cloud Height, Top	1902	CERES	TRM,AM,PM	Barkstrom	1896	AM	0.1 :: 0.05		1/day		100 km :: G		1 km :: Cloud	
Barron	Cloud Height, Top	1903	AIRS	PM	Welch, Goetz	1908*	BM	0.1 :: 0.1		2/day [d,n]		50 km :: G		N/A :: Cloud	
Barron	Cloud Height, Top	1903	CERES	TRM,AM,PM	Barkstrom	1896	AM	75% :: 10%		6/day [d,n]		25 km :: G		N/A :: Atmos	
Barron	Cloud Height, Top	1903	MIMR	PM	TBD	3598	BM	0.1 :: 0.05		1/day		10 km :: R		1 km :: Cloud	
Barron	Cloud Height, Top	1903	CERES	TRM,AM,PM	Barkstrom	1896	AM	75% :: 10%		6/day [d,n]		25 km :: G		N/A :: Trop	
Barron	Cloud Height, Top	1903	ASTER	AM1	Welch	3626	AM			1/16 day		90 m :: L		N/A :: Cloud	
Barron	Cloud Optical Depth	2301	CERES	TRM,AM,PM	Barkstrom	2317	BM	3% :: 3%		1/day		100 km :: Ocean		N/A :: Cloud	
Barron	Cloud Optical Depth	2301	CERES	TRM,AM,PM	Barkstrom	2322	BM	10% :: 5%		1/day [Avg], 1/mo [Avg]		1.25 dg :: G		N/A :: Atmos	
Barron	Cloud Optical Depth	2301	EOSP	AERO,AM2	Travis	2313	AM	10% :: 5%		1/day [d]		1.25 dg :: G		N/A :: Atmos	
Barron	Cloud Optical Depth	2301	MODIS	AM,PM	King	2312	AM	20% :: 10%		1/day, 1/mo		40 km :: G		Column :: Cloud	
Barron	Cloud Optical Depth	2301	CERES	TRM,AM,PM	Barkstrom	2321	AM	20% :: 10%		3/day [d]		1 dg :: G		N/A :: Cloud	
Barron	Cloud Optical Depth	2302	MODIS	AM,PM	King	2311	BM	25% :: 10%		1/day		25 km :: G		N/A :: Atmos	
Barron	Cloud Optical Depth	2303	HIRIS	AM2	Welch	2309	BM	3% :: 3%		1/day [d]		5 km :: G		N/A :: Cloud	
Barron	Cloud Optical Depth	2303	ASTER	AM1	Welch	2310	AM	3% :: 3%		1/day		30 m :: Ocean/L		N/A :: Cloud	
Barron	Cloud Optical Depth	2303	MODIS	AM,PM	Menzel	2466	BM	3% :: 1.5%		1/16 day		30 m :: L		N/A :: Cloud	
Barron	Cloud Optical Depth	2303	ASTER	AM1	Welch	2467	BM	3% :: 3%		1/16 day		15-30 m :: L		N/A :: Cloud	
Barron	Cloud Temperature, Emission	2458	MODIS	AM,PM	Menzel	2466	BM	2 :: 1		1/day		100 km :: G		N/A :: Cloud	
Barron	Cloud Temperature, Emission	2458	AIRS	PM	Chahine, Chedin,	2463	AM	2 C :: 1 C		1/day, 1/mo		1 dg :: G		N/A :: Cloud	
Barron	Cloud Temperature, Emission	2459	MODIS	AM,PM	Menzel	2467	BM	1 K :: 0.5 K		2/day [d,n]		15 x 15 - 50 x 50 km :: G		N/A :: Cloud	
Barron	Cloud Temperature, Emission	2459	ASTER	AM1	Welch	2465	AM	2 :: 1		1/day		10 km :: R		N/A :: Cloud	
Barron	Cloud Temperature, Emission	2459	MODIS	AM,PM	Menzel	2465	AM	2 C :: 1 C		2/day		5 km :: G		N/A :: Cloud	
Barron	Cloud Temperature, Emission	2459	ASTER	AM1	Welch	2465	AM	2 K :: 2 K		1/16 day		90 m :: L		N/A :: Cloud	
Barron	Drainage_Network Structure	2905	HIRIS	AM2	Kieffer, Clark	2884	AM	30 m ::		1/13 mo		30 m :: Land/L		N/A :: Sfc	
Barron	Drainage_Network Structure	2905	HIRIS	AM2	Kieffer, Clark	2884	AM	:: 30%				30 m :: L		N/A :: Sfc	

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product			Accuracy		Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #			
Barron	Drainage Network Structure	2905	ASTER	AM1	Kahle, JGI	2828	AM	>50 m :: >30 m	15 m :: Land/R.L
Barron	Humidity Profile	1806						10% :: 5%	10 km :: R
			AIRS	PM	Chedin, Fleming	1828	BM	10% :: 5%	15 x 50 - 50 x 50 km :: G
			TES	CHEM	Beer	1844	AM	1/16 day	16 x 5 km :: G
Barron	Humidity Profile	1807						10% :: 5%	100 km :: G
			AIRS	PM	Chedin, Fleming	1828	BM	1/3 mo	15 x 50 - 50 x 50 km :: G
Barron	Ice Sheet Elevation	2906						100 ::	10 km :: Land/Cryo
			ALT	ALT	Zwally	2911	BM	1/yr	15 km :: Land/Cryo
			GLRS-A	ALT	Bentley	2912	AM	1/mo	75 m :: Land/Cryo
Barron	Ice Sheet Elevation	2907						100 ::	100 km :: Land/Cryo
			ALT	ALT	Zwally	2911	BM	1/yr	15 km :: Land/Cryo
Barron	Ice Sheet Temperature	3051						1 K ::	10 km :: Land/Cryo
			MODIS	AM/PM	Wan	2485	BM	1/day, 1/wk	10 km :: Land
Barron	Ice Sheet Temperature	3052						1 K ::	100 km :: Land/Cryo
			MODIS	AM/PM	Wan	2485	BM	1/day, 1/wk	10 km :: Land
			AIRS	PM	Chedin, Fleming	2481	BM	2/day [d,n]	50 km :: Land
Barron	Ice Sheet Thickness	3053						100 ::	10 km :: Land/Cryo
			GLRS-A	ALT	Bentley	2912	BM	1/mo	75 m :: Land/Cryo
			ALT	ALT	Zwally	2911	BM	1/yr	15 km :: Land/Cryo
Barron	Ice Sheet Thickness	3054						100 ::	100 km :: Land/Cryo
			GLRS-A	ALT	Bentley	2912	BM	1/mo	75 m :: Land/Cryo
			ALT	ALT	Zwally	2911	BM	1/yr	15 km :: Land/Cryo
Barron	Ice Sheet Velocity	2929						10 mm/day :: 10 mm/day	N/A :: Land/Cryo
			GLRS-A	ALT	Bentley	2897	BM	1/mo	N/A :: Land/Cryo
			HIRIS	AM2	Kieffer	2932	BM	1/yr	100 m :: Cryo
			HIRIS	AM2	Kieffer	2895	AM	1% :: 0.2%	30 m :: Glacier/L
			ASTER	AM1	Kieffer	2931	AM	20 m/yr :: 10 m/yr	15 m :: Land/Cryo
			HIRIS	AM2	Kieffer	2930	AM	10% :: variable	100 m :: Land/Cryo
Barron	Lake Extent	3062						10% :: 10%	Land/R
			ASTER	AM1	TBD	3633	BM	TBD :: TBD	TBD :: TBD
Barron	Land_gfc Roughness	1545						10% :: 0.1	10 km :: Land/R
			MODIS	AM/PM	Tanne, Muller	1557*	BM	15% :: 5 - 8%	1 km :: G.R
			MODIS	AM/PM	Muller, Tanne	3670*	BM	5% :: 3%	1 km :: Land/R
Barron	Land_gfc Roughness	1546						10% :: 0.1	30 m :: Land/L
			ASTER	AM1	Kahle, JGI	2828	BM	>50 m :: >30 m	15 m :: Land/R.L
Barron	Land_gfc Roughness	1547						10% :: 0.1	100 km :: Land
			MODIS	AM/PM	Tanne, Muller	1557*	BM	15% :: 5 - 8%	1 km :: G.R
			MODIS	AM/PM	Muller, Tanne	3670*	BM	5% :: 3%	1 km :: Land/R
Barron	Land_gfc Temperature, Skin	2472						1 :: 0.5	30 m :: Land/L
			ASTER	AM1	Kahle, Becker, C	2483	BM	1-6 K :: 0.3 K	90 m :: Land
			MODIS	AM/PM	Wan	2484	AM	1 C :: 1 C	1 km :: Land/R
Barron	Land_gfc Temperature, Skin	2473						1 :: 0.5	10 km :: Land/R
			MODIS	AM/PM	Wan	2485	BM	1-3 C :: 1 C	10 km :: Land
			ASTER	AM1	Kahle, Becker, C	2483	AM	1-6 K :: 0.3 K	90 m :: Land
Barron	Land_gfc Temperature, Skin	2474						1 :: 0.5	100 km :: G
			MODIS	AM/PM	Wan	2485	BM	1-3 C :: 1 C	10 km :: Land
			MODIS	AM/PM	Wan	2484	AM	1 C :: 1 C	1 km :: Land/R

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

[illegible]

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product					Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.
Barron	Radiative Flux, SW	2238	MODIS	AM,PM	Gordon et al	2416	AM-	5% :: 5%	1/day, 1/wk, 1/mo	1 km :: Ocean/R,L	N/A :: Sfc
Barron	Radiative Flux, SW	2239	MODIS	AM,PM	Gordon et al	2417	AM-	5% :: 5%	1/day, 1/wk, 1/mo	20 km :: Ocean/G,R	N/A :: Sfc
Barron	Radiative Flux, SW	2239	CERES	TRM,AM,PM	Barkstrom	2251	BM	10 :: 5	1/day	100 km :: G	N/A :: TOA
Barron	Sea_Ice Conc	3136	MIMR	PM	TBD	3611	BM	7 W/m^2 :: 2 W/m^2	1/day (Avg), 1/mo (Avg)	1.25 x 1.25 dg :: G	N/A :: TOA
Barron	Sea_Ice Conc	3137	MIMR	PM	TBD	3611	BM	5% :: 5%	1/day	100 km :: Ocean/Cryo	N/A :: Sfc
Barron	Sea_Ice Conc	3137	MIMR	PM	TBD	3611	BM	5% :: 5%	1/day	22 km :: Ocean/Cryo	N/A :: Sfc
Barron	Sea_Ice Conc	3167	ASTER	AM1	Welch	3152	BM	5% :: 5%	1/day	30 m :: Ocean/Cryo	N/A :: Sfc
Barron	Sea_Ice Conc	3168	MODIS	AM,PM	Salomonson	3153	BM	5% :: 5%	1/day	90 m :: Ocean/Cryo	N/A :: Sfc
Barron	Sea_Ice Conc	3168	AIRS	PM	Chedin, Saelin	3151*	AM	<=5% :: <=5% 0.1 :: 0.1	1/day, 1/wk, 1/mo 2/day [d,n]	10 km :: Ocean/Cryo 50 km :: Ocean/Cryo	N/A :: Sfc N/A :: Sfc
Barron	Sea_Ice Conc, Multi-year	3173	ASTER	AM1	Welch	3152	AM	5% :: 5%	1/day	90 m :: Ocean/Cryo	N/A :: Sfc
Barron	Sea_Ice Conc, Multi-year	3173	MIMR	PM	TBD	3609	BM	5% :: 5%	1/day	100 km :: Ocean/Cryo	N/A :: Sfc
Barron	Sea_Ice Conc, Multi-year	3174	MIMR	PM	TBD	3611	BM	5% :: 5%	1/day	22 km :: Ocean/Cryo	N/A :: Sfc
Barron	Sea_Ice Conc, Multi-year	3174	MIMR	PM	TBD	3611	BM	5% :: 5%	1/day	10 km :: Ocean/Cryo	N/A :: Sfc
Barron	Sea_Ice Conc, Multi-year	3174	MIMR	PM	TBD	3611	BM	5% :: 5%	1/day	22 km :: Ocean/Cryo	N/A :: Sfc
Barron	Sea_Ice Extent	3160	MODIS	AM,PM	Salomonson	3153	BM	5% :: 5%	1/day	100 km :: Ocean/Cryo	N/A :: Sfc
Barron	Sea_Ice Extent	3161	MIMR	PM	TBD	3613	BM	<=5% :: <=5%	1/day, 1/wk, 1/mo	10 km :: Ocean/Cryo	N/A :: Sfc
Barron	Sea_Ice Extent	3161	MODIS	AM,PM	Salomonson	3153	BM	5% :: 5%	1/day	10 km :: Ocean/Cryo	N/A :: Sfc
Barron	Sea_Ice Extent	3161	MIMR	PM	TBD	3613	BM	<=5% :: <=5%	1/day, 1/wk, 1/mo	10 km :: Ocean/Cryo	N/A :: Sfc
Barron	Sea_Ice Extent	3161	MODIS	AM,PM	Salomonson	3154	AM	<=5% :: <=5%	1/day, 1/wk, 1/mo	22 km :: Ocean/Cryo	N/A :: Sfc
Barron	Sea_Ice Extent	3161	MIMR	PM	TBD	3611	AM	<=5% :: <=5%	1/day, 1/wk, 1/mo	1 km :: Ocean/Cryo,R	N/A :: Sfc
Barron	Sea_Ice Leads	3166	ASTER	AM1	Welch	3617	BM	5% :: 5%	1/day	22 km :: Ocean/Cryo	N/A :: Sfc
Barron	Sea_Ice Leads	3166	ASTER	AM1	Welch	3622	BM	5% :: 5%	1/day	100 km :: Ocean/Cryo	N/A :: Sfc
Barron	Sea_sfc Temperature (SST)	2506	MODIS	AM,PM	Brown, Barton	2532	BM	0.5 K ::	1/day	100 km :: Ocean	N/A :: Sfc
Barron	Sea_sfc Temperature (SST)	2506	AIRS	PM	Chedin, Fleming	2523*	BM	0.3-0.4K :: 0.1-0.6K	1/day, 1/wk, 1/mo	50 km :: Ocean	N/A :: Sfc
Barron	Sea_sfc Temperature (SST)	2506	MODIS	AM,PM	Brown	2528	AM	0.5 - 1 K :: 0.4 - 0.5 K	2/day [d,n]	50 km :: Ocean	N/A :: Sfc
Barron	Sea_sfc Temperature (SST)	2506	MODIS	AM,PM	Brown, Barton	2531	AM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G,R	N/A :: Sfc
Barron	Sea_sfc Temperature (SST)	2506	MIMR	PM	TBD	3603	AM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G,R	N/A :: Sfc
Barron	Sea_sfc Temperature (SST)	2507	MODIS	AM,PM	Brown	2529	BM	0.3 K ::	1/day	60 km :: Ocean	N/A :: Sfc
Barron	Sea_sfc Temperature (SST)	2507	MODIS	AM,PM	Brown	2530	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	10 km :: Ocean/R	N/A :: Sfc
Barron	Sea_sfc Temperature (SST)	2507	MODIS	AM,PM	Brown, Barton	2531	AM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	4 km :: Ocean/R,L	N/A :: Sfc
Barron	Sea_sfc Temperature (SST)	2507	MODIS	AM,PM	Brown	2528	AM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	4 km :: Ocean/R,L	N/A :: Sfc
Barron	Sea_sfc Temperature (SST)	2507	MODIS	AM,PM	Brown, Barton	2531	AM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G,R	N/A :: Sfc
Barron	Sea_sfc Temperature (SST)	2507	MODIS	AM,PM	Brown, Barton	2531	AM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G,R	N/A :: Sfc
Barron	Snow Cover	3003	MODIS	AM,PM	Salomonson	3020	BM	5% :: 5%	1/day	100 km :: Land	N/A :: Sfc
Barron	Snow Cover	3003	MIMR	PM	TBD	3607	BM	<=5% :: <=5%	1/day, 1/wk	10 km :: Land	N/A :: Sfc
Barron	Snow Cover	3003	AIRS	PM	Saelin	3018*	AM	<=5% :: <=5%	2/day [d,n]	22 km :: Land	N/A :: Sfc
Barron	Snow Cover	3003	AIRS	PM	Saelin	3018*	AM	<=5% :: <=5%	2/day [d,n]	50 km :: Land	N/A :: Sfc

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match		
Barron	Snow Cover	3004							
			ASTER	AM1	Welch	3624	BM	30 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Dozier	3019	BM	90 m :: Ocean/Cryo	N/A :: Sfc
Barron	Snow Cover	3005							
								50 m :: Cryo/L	N/A :: Sfc
								10 km :: Land/R	N/A :: Sfc
Barron	Soil Composition	2794	MODIS	AM,PM	Salomonson	3020	BM	10 km :: Land	N/A :: Sfc
								100 km :: Land	N/A :: Sfc
			ASTER	AM1	Kahle, Gillespie	2803*	BM	90 m :: Land/R,L	N/A :: Sfc
Barron	Soil Composition	2795	ASTER	AM1	Gillespie	2801	AM	15 m :: Land/R,L	N/A :: Sfc
			MODIS	AM,PM	Huete	2095	AM-	1 km :: Land/R	N/A :: Sfc
								100 km :: Land	N/A :: Sfc
Barron	Soil Composition	2796	ASTER	AM1	Kahle, Gillespie	2803*	BM	90 m :: Land/R,L	N/A :: Sfc
			HIRIS	AM2	Rowan, Clark	2766	AM	30 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Rowan, Clark	2772	AM	30 m :: Land/L	N/A :: Sfc
Barron	Soil Composition	2797	HIRIS	AM2	Rowan, Clark	2776	AM	30 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Rowan, Clark	2784	AM	30 m :: Land/L	N/A :: Sfc
			ASTER	AM1	Gillespie	2801	AM	15 m :: Land/R,L	N/A :: Sfc
Barron	Soil Extent	2798	ASTER	AM1	Kahle, Gillespie	2803*	BM	90 m :: Land/R,L	N/A :: Sfc
			MODIS	AM,PM	Huete	2095	AM-	1 km :: Land/R	N/A :: Sfc
			ASTER	AM1	Gillespie	2801	AM	15 m :: Land/R,L	N/A :: Sfc
Barron	Soil Extent	2799	MODIS	AM,PM	Srahler, Huete et	2670	BM	5 km :: Land	N/A :: Sfc
			ASTER	AM1	Kahle, Gillespie	2803*	AM	90 m :: Land/R,L	N/A :: Sfc
			ASTER	AM1	Gillespie	2801	AM	15 m :: Land/R,L	N/A :: Sfc
Barron	Soil Moisture	2946	MODIS	AM,PM	Srahler, Huete et	2670	BM	5 km :: Land	N/A :: Sfc
			ASTER	AM1	Kahle, Gillespie	2803*	AM	90 m :: Land/R,L	N/A :: Sfc
			ASTER	AM1	Gillespie	2801	AM	15 m :: Land/R,L	N/A :: Sfc
Barron	Soil Moisture	2947	MODIS	AM,PM	Srahler, Huete et	2670	BM	5 km :: Land	N/A :: Sfc
			ASTER	AM1	Kahle, Gillespie	2803*	AM	90 m :: Land/R,L	N/A :: Sfc
			ASTER	AM1	Gillespie	2801	AM	15 m :: Land/R,L	N/A :: Sfc
Barron	Soil Proportion, Bare	2785	MODIS	AM,PM	Srahler, Huete et	2670	BM	5 km :: Land	N/A :: Sfc
			ASTER	AM1	Kahle, Gillespie	2803*	AM	90 m :: Land/R,L	N/A :: Sfc
			MODIS	AM,PM	Srahler, Huete et	2670	BM	5 km :: Land	N/A :: Sfc
Barron	Soil Proportion, Bare	2786	MODIS	AM,PM	Srahler, Huete et	2670	BM	5 km :: Land	N/A :: Sfc
			ASTER	AM1	Kahle, Gillespie	2803*	AM	90 m :: Land/R,L	N/A :: Sfc
			MODIS	AM,PM	Srahler, Huete et	2670	BM	5 km :: Land	N/A :: Sfc
Barron	Soil Proportion, Bare	2787	HIRIS	AM2	Usain, Weisman	2741	BM	30 m :: Land/L	N/A :: Sfc
			ASTER	AM1	Gillespie	2801	AM	15 m :: Land/R,L	N/A :: Sfc
			HIRIS	AM2	Usain et al	2746	AM	30 m :: Land/L	N/A :: Sfc

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product			Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match		
Barron	Vegetation Structure	2640	HIRIS	AM2	Ustin, Westman	2741	AM	30 m :: Land/L	N/A :: Sfc
Barron	Vegetation Type	2728						10 km :: Land/R	N/A :: Sfc
			MODIS	AM, PM	Strahler, Huete et	2670	BM	5 km :: Land	N/A :: Sfc
			MODIS	AM, PM	Strahler, Huete et	2669	AM	1 km :: Land	N/A :: Sfc
			HIRIS	AM2	Westman	2644	AM	30 m :: Land/L	N/A :: Sfc
Barron	Vegetation Type	2729						30 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Westman	2644	BM	30 m :: Land/L	N/A :: Sfc
Barron	Vegetation Type	2730						100 km :: Land	N/A :: Sfc
			MODIS	AM, PM	Strahler, Huete et	2670	BM	5 km :: Land	N/A :: Sfc
Barron	Vegetation Type Boundaries	2739						30 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Westman	2644	BM	30 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Ustin et al	2746	AM	30 m :: Land/L	N/A :: Sfc
			ASTER	AM1	Gillespie	2747*	AM	15 m :: Land/R, L	N/A :: Sfc
Barron	Wind Velocity, Sea_gfc	1653	STIKSCAT	CHEM	Freilich	1680	BM	10 km :: Ocean/R	N/A :: Sfc
Barron	Wind Velocity, Sea_gfc	1657	STIKSCAT	CHEM	Freilich	1679	BM	25 km :: Ocean	N/A :: Near_Sfc
			STIKSCAT	CHEM	Freilich	1680	AM	100 km :: Ocean	N/A :: Sfc
Bates	Aerosol Layer Boundary Height	1013						1 dg :: Ocean	N/A :: New_Sfc
			GLRS-A	ALT	Spinthorne et al	1014	BM	25 km :: Ocean	N/A :: New_Sfc
Bates	Aerosol Size-distribution	1019						2-200 km :: G	75 m :: Atmos
			MISR	AM	Diner	1993	BM	15.4 km :: G	Column :: Atmos
			MISR	AM	Diner	3678	BM	15.4 km :: G	Column :: Atmos
			MODIS	AM, PM	Tanre, Kaufman	1022	AM	15.4 km :: G	Column :: Atmos
Bates	Aerosol XXX	1005						0.5 dg :: G, R	N/A :: Atmos
			SAGE-III	AERO, CHEM	McCormick	1012	BM	100 km :: G	1 km :: Atmos
			HIRDLS	CHEM	Barnett, Gilie	1992	BM	<2 x <1 dg :: G	1 km :: 0-40 km
Bates	Albedo, Land_gfc	1993						4 x 4 dg :: G	1 km :: 7-30 km
			AIRS	PM	Gautier ??	2000*	BM	50 km :: Land	N/A :: Sfc
			MODIS	AM, PM	Muller, Strahler	2001	AM	50 km :: Land	N/A :: Sfc
			MODIS	AM, PM	Tanre, Muller	2016*	AM	1 km :: Land/R	N/A :: TOA
Bates	Cloud Cover	2073						10 km :: G, R	N/A :: Sfc
			CERES	TRM, AM, PM	Barkstrom	2087	BM	1 x 1 dg :: G	N/A :: Cloud
			CERES	TRM, AM, PM	Barkstrom	2086	AM	1.25 x 1.25 dg :: G	N/A :: Atmos
			MODIS	AM, PM	King	2082	AM	25 km :: G	N/A :: Atmos
			CERES	TRM, AM, PM	Barkstrom	2088	AM	1 dg :: G	N/A :: Cloud
Bates	Cloud Cover	2074						1.25 x 1.25 dg :: G	N/A :: Atmos
			MODIS	AM, PM	King	2082	BM	1 dg :: G	N/A :: Cloud
			CERES	TRM, AM, PM	Barkstrom	2088	BM	1 dg :: G	N/A :: Cloud
Bates	Cloud Cover, Cirrus	2069						1.25 x 1.25 dg :: G	N/A :: Atmos
			GLRS-A	ALT	Spinthorne	1410	AM	100 km :: G	0.5 km :: Trop
			GLRS-A	ALT	Spinthorne	1400	AM	1-10 km :: G	75 m ::
			MODIS	AM, PM	King	2082	AM	2-10 km :: G	75 m ::
			CERES	TRM, AM, PM	Barkstrom	2088	AM	1 dg :: G	N/A :: Cloud
			AIRS	PM	Chabine, Chedin,	2062	AM	1.25 x 1.25 dg :: G	N/A :: Atmos
			GLRS-A	ALT	Spinthorne	2078	AM	15 x 15 - 50 x 50 km :: G	N/A :: Cloud
								10-200 km :: G	N/A ::

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy		Temporal Resolution		Horizontal Resol. :: Cover.		Vertical Resol. :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Cover.			
Bates	Cloud Cover, Cirrus	2072	GLRS-A	ALT	Spinshine	1410	AM	0.05 :: 0.025	2/day [d,n]	15 x 45 km :: G		N/A :: Cloud	
			GLRS-A	ALT	Spinshine	1400	AM	0.2 ::	1/(2-16 day)	1-10 km :: G		75 m ::	
			AIRS	PM	Chahine, Chedin,	2062	AM	0.05 :: 0.025	2/day [d,n]	2-10 km :: G		75 m ::	
			MODIS	AM,PM	King	2081	AM	10% :: 5%	2/day [d,n], 1/mo	15 x 15 - 50 x 50 km :: G		N/A :: Cloud	
			CERES	TRM,AM,PM	Barkstrom	2086	AM	5% :: 2%	6/day [d,n]	5 km :: G		N/A :: Cloud	
			GLRS-A	ALT	Spinshine	2078	AM	1% ::	1/(2-16 day)	25 km :: G		N/A :: Atmos	
			MODIS	AM,PM	King, Menzel	1765	BM	90% Conf :: 90% Conf	1/day, 1/mo	10-200 km :: G		N/A ::	
			CERES	TRM,AM,PM	Barkstrom	1767	AM	90% Conf :: 90% Conf	1/day [Avg], 1/mo [Avg]	1 dg :: G		N/A :: Cloud	
			CERES	TRM,AM,PM	Barkstrom	1769	AM	90% Conf :: 90% Conf	1/(6 hr)	1.25 x 1.25 dg :: G		N/A :: Atmos	
			EOSP	AERO,AM2	Travis	1770	AM	95% Corr	1/day [d]	100 km :: G		N/A :: Cloud	
Bates	Cloud Drop Size (Effective Radius)	1777	MODIS	AM,PM	King, Menzel	1781	BM	0-40% :: 5%	1/day, 1/mo	1 dg :: G		N/A :: Cloud	
			CERES	TRM,AM,PM	Barkstrom	1783	BM	30% :: 10%	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G		N/A :: Atmos	
			EOSP	AERO,AM2	Travis	1774	AM	25% :: 25%	1/day [d]	100 km :: G		N/A :: Cloud	
			CERES	TRM,AM,PM	Barkstrom	1393	BM	100 mb	6/day [d,n]	25 km :: G		100 mb :: Cloud	
			GLRS-A	ALT	Spinshine et al	1389	AM	1.0 km :: 0.1 km	1/(2-16 day)	25 km :: G		0.1 km :: Atmos	
Bates	Cloud Height, Base	1384	CERES	TRM,AM,PM	Barkstrom	1394	BM	100 mb	1/(6 hr)	1 x 1 dg :: G		100 mb :: Cloud	
								1.0 km :: 0.1 km	1/(6 hr)	1.25 x 1.25 dg :: G		0.1 km :: Atmos	
								500 m ::	2/day	50 km :: G		N/A :: Cloud	
Bates	Cloud Height, Cirrus	1401	AIRS	PM	Chahine, Chedin,	1423*	BM	0.5 km :: 0.25 km	2/day [d,n]	15 x 15 - 50 x 50 km :: G		N/A :: Cloud	
			GLRS-A	ALT	Spinshine	1410	AM	0.2 ::	1/(2-16 day)	1-10 km :: G		75 m ::	
			GLRS-A	ALT	Spinshine	1400	AM	75 m ::	1/(2-16 day)	2-10 km :: G		75 m ::	
Bates	Cloud Height, Stratiform	1406	GLRS-A	ALT	Spinshine	1400	BM	50 m ::	2/day	50 km :: G		N/A :: Cloud	
			AIRS	PM	Chahine, Chedin,	1423*	AM	75 m ::	1/(2-16 day)	2-10 km :: G		75 m ::	
			AIRS	PM	Chahine, Chedin,	1423*	AM	0.5 km :: 0.25 km	2/day [d,n]	15 x 15 - 50 x 50 km :: G		N/A :: Cloud	
Bates	Cloud Height, Top	1415	CERES	TRM,AM,PM	Barkstrom	1431	BM	0.5 km :: 0.1 km	1/(6 hr)	1 x 1 dg :: G		100 mb :: Cloud	
			CERES	TRM,AM,PM	Barkstrom	1429	AM	1.0 km :: 0.1 km	6/day [d,n]	1.25 x 1.25 dg :: G		0.1 km :: Atmos	
			AIRS	PM	Chahine, Chedin,	1423*	BM	0.5 km :: 0.25 km	2/day [d,n]	25 km :: G		0.1 km :: Atmos	
Bates	Cloud Ice Content	1890	AIRS	PM	Saelin	1893*	BM	0.02 :: 0.02	1/day	10 km :: G		N/A :: Cloud	
								TBD :: TBD	2/day [d,n]	50 km :: G		N/A :: Cloud	
			AIRS	PM	Saelin	1893*	BM	TBD :: TBD	2/day [d,n]	50 km :: G		N/A :: Cloud	
Bates	Cloud Ice Index	1892	AIRS	PM	Saelin	1893*	BM	75% ::	1/(6 hr)	1 x 1 dg :: G		N/A :: Cloud	
			CERES	TRM,AM,PM	Barkstrom	1895	BM	75% :: 10%	6/day [d,n]	1.25 x 1.25 dg :: G		1 yr :: 0-30 km	
			CERES	TRM,AM,PM	Barkstrom	1896	AM	75% :: 10%	1/day [Avg], 1/mo [Avg]	25 km :: G		1 yr :: Atmos	
Bates	Cloud Liq_ water Content	1894	CERES	TRM,AM,PM	Barkstrom	1897	AM	75% :: 10%	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G		1 yr :: Atmos	
			MLS	MO	Waters	1898	AM	5%	1/day [z, mean]	0.1 x 2.5 dg :: 82N-82S		2.5 km [1.2] :: Upper Trop	
			AIRS	PM	Roetenkranz	1908*	BM	0.1 :: 0.1	2/day [d,n]	50 km :: G		N/A :: Cloud	
Bates	Cloud Liq_ water Content	1904	AIRS	PM	Roetenkranz	1908*	BM	0.1 :: 0.1	2/day [d,n]	50 km :: G		N/A :: Cloud	
			MODIS	AM,PM	King	2311	BM	20% :: 10%	1/day [d]	15 x 45 km :: G		N/A :: Cloud	
Bates	Cloud Optical Depth	2304	MODIS	AM,PM	King	2311	BM	20% :: 10%	1/day [d]	5 km :: G		N/A :: Cloud	

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy		Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel					
Bates	Cloud Optical Depth	2304	EOSP	AERO,AM2	Travis	2313	BM	20% :: 10%	1/day [d]	40 km :: G	Column :: Cloud		
			MODIS	AM,PM	King	2312	AM	20% :: 10%	1/day, 1/mo	1 dg :: G	N/A :: Cloud		
			GLRS-A	ALT	Spinhome et al	2308	AM	0.1 ::		2-200 km :: G	N/A :: Cloud		
Bates	Cloud Optical Depth	2305						20% :: 10%	1/day, 1/mo	1 dg :: G	N/A :: Cloud		
			MODIS	AM,PM	King	2312	BM	20% :: 10%	1/day, 1/mo	1 dg :: G	N/A :: Cloud		
			EOSP	AERO,AM2	Travis	2313	AM	20% :: 10%	1/day [d]	40 km :: G	Column :: Cloud		
Bates	Cloud Pressure, Top	1527	CERES	TRM,AM,PM	Barkstrom	2317	AM	10% :: 5%	1/day [Avg], 1/mo [Avg]	1.25 dg :: G	N/A :: Atmos		
			CERES	TRM,AM,PM	Barkstrom	2322	AM	10% :: 5%	1/day [Avg], 1/mo [Avg]	1.25 dg :: G	N/A :: Atmos		
								50 mb :: 20 mb	2/day	5 km :: G	N/A :: Cloud		
Bates	Cloud Temperature, Top	2460	MODIS	AM,PM	Menzel	1528	BM	30 mb :: 20 mb	2/day	5 km :: G	N/A :: Cloud		
			EOSP	AERO,AM2	Travis	1530	AM	30 mb :: 30 mb	1/day [d]	40 km :: G	30 mb :: Cloud		
								1 K :: 0.5 K	2/day [d,n]	15 x 45 km :: G	N/A :: Cloud		
Bates	Geopotential Height Gradient	1499	AIRS	PM	Chahine, Chedin,	2463	BM	1 K :: 0.5 K	2/day [d,n]	15 x 15 - 50 x 50 km :: G	N/A :: Cloud		
			MODIS	AM,PM	Menzel	2467	AM	2 C :: 1 C	2/day	5 km :: G	N/A :: Cloud		
								0.04 m/km ::	2/day	4 x 4 dg :: G	1-1.5 km :: Atmos		
Bates	H2O Conc	1808	HIRDLS	CHEM	Barnett, Gille	1500	BM	0.04 m/km :: 0.04 m/km	2/day [d,n]	4 x 4 dg :: G	1 km :: 15-80 km		
								5-10% :: 1-5%	2/day	4 x 4 dg :: G	1-1.5 km :: 10-80 km		
			HIRDLS	CHEM	Barnett, Gille	1837	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-80 km		
Bates	Humidity Profile	1809	MLS	MO	Walters	1838	AM	2% :: <500 km	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 100 km		
			SAFIRE	MO	Russell	1839	AM	5% (20-80 km)	1/(36-72 s) [?]	25 x 2.5-5 dg :: 86S-86N	3 km :: 10-100 km		
			SAGE-III	AERO,CHEM	McCormick	1841	AM	10% :: 15%	1/(2 min), 30/day	<2 x <1 dg :: G	1 km :: 3-50 km		
Bates	Ice Sheet Cover	2918	TES	CHEM	Beer	1843	AM	0.5 ppm	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km		
								10% :: 5%	2/day [d,n]	50 km :: G	2 km :: Atmos		
			AIRS	PM	Chedin, Fleming,	1828	BM	10% :: 5%	2/day [d,n]	15 x 50 - 50 x 50 km :: G	2 km :: Atmos		
Bates	Land_sfc Emissivity	2112	AIRS	PM	Saelin	2921*	BM		2/day [d,n]	50 km :: Land/Cryo	N/A :: Sfc		
								0.05 :: 0.025	2/day [d,n]	50 km :: Land	N/A :: Sfc		
			AIRS	PM	Chedin, Fleming,	2113*	BM	0.05 :: 0.025	2/day [d,n]	15 x 15 - 50 x 50 km :: Land	N/A :: Sfc		
Bates	Land_sfc Temperature, Skin	2475	MODIS	AM,PM	Wan	3324*	BM	0.05 :: 0.02	1 day, 1 wk	10 km :: Land	N/A :: Sfc		
								1.0 K :: 0.5 K	2/day [d,n]	50 km :: Land	N/A :: Sfc		
			AIRS	PM	Chedin, Fleming,	2481	BM	0.5 K :: 0.25 K	2/day [d,n]	50 km :: Land	N/A :: Sfc		
Bates	Land_sfc Temperature-Difference, Day-Night	2538	AIRS	PM				0.5 K :: 0.25 K	1/day	50 km :: Land	N/A :: Sfc		
			MODIS	AM,PM	Huete	2537*	AM	1 K :: 1 K	2/day [d,n]	50 km :: G	N/A :: Sfc		
			ASTER	AM1	Kieffer et al	2540	AM	1-2 K :: 0.3 K	1/day	856 m :: R	N/A :: Sfc		
Bates	Level-1B Radiance, AIRS	2346								90 m :: Land/R,L	N/A :: Sfc		
			AIRS	PM	Chahine	2347	BM	0.2 dg NEAT :: 0.2 dg NEAT	2/day [d,n]	15 x 15 km :: G	N/A :: N/A		
								0.2 dg NEAT :: 0.2 dg NEAT	2/day [d,n]	40 x 40 km :: G	N/A :: N/A		
Bates	Level-1B Radiance, AMSU-A	2349	AIRS	PM	Chahine	2350	BM	0.2 dg NEAT :: 0.2 dg NEAT	2/day [d,n]	40 x 40 km :: G	N/A :: N/A		
								0.2 dg NEAT :: 0.2 dg NEAT	2/day [d,n]	15 x 15 km :: G	N/A :: N/A		
			AIRS	PM	Chahine	2352	BM	0.2 dg NEAT :: 0.2 dg NEAT	2/day [d,n]	15 x 15 km :: G	N/A :: N/A		
Bates	O3 Conc	1305						5-10% :: 1-5%	2/day	4 x 4 dg :: G	1-1.5 km :: 10-80 km		
			HIRDLS	CHEM	Barnett, Gille	1318	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-80 km		
			MLS	MO	Walters	1319	AM	<= 3% :: 1% (<50 km)	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 110 km		
Bates			SAFIRE	MO	Russell	1320	AM	5% (10-70 km)	1/(18-72 s) [?]	25 x 2.5-5 dg :: 86S-86N	1.5-3 km :: 10-100 km		
			SAGE-III	AERO,CHEM	McCormick	1321	AM	6% :: 5%	1/(2 min), 30/day	<2 x <1 dg :: Polar	1 km :: 6-85 km		

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product					Accuracy	Temporal Resolution	Horizontal	Vertical
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.
Bates	Ocean Wave Height	3126	ALT	ALT	Fu	3129	AM	20% :: 20% >5m,10% ::	1/day	50-75 m :: Ocean	7 km :: Ocean N/A :: Sfc
Bates	Ocean Wave Height, Along-track	3128	ALT	ALT	Fu	3129	BM	>5m,10% ::		7 km :: Ocean	N/A :: Sfc
Bates	PBL Height	1512						75 m ::		2-200 km :: G	75 m :: Trop N/A :: Sfc
Bates	Precipitable Water	1862	GLRS-A	ALT	Spinthorne et al	1514	BM	150 m ::	1/2-16 day	2-200 km :: G	75 m :: Trop N/A :: Trop
			AIRS	PM	Chedin, Fleming, Menzel	1869	BM	5% :: 3%	2/day [d,n]	50 km :: G	N/A :: Trop
			MODIS	AM,PM		1875	BM	5% :: 3%	2/day [d,n]	50 km :: G	N/A :: Trop
			MODIS	AM,PM	Kaufman, Tarré	1874	AM	10 mm :: 5 mm	2/day	5 km :: G	N/A :: Atmos
			AIRS	PM	Rosenkranz	3693	AM	8% :: 6%	1/day	5 km :: Land	N/A :: Atmos
Bates	Precipitation Index	1968						2 mm/hr :: 1 mm/hr	2/day [d,n]	50 km :: G	N/A :: Trop
			AIRS	PM	Susskind	1969*	BM	2mm/day :: 1mm/day	2/day [d,n]	50 km :: G	N/A :: Trop
			AIRS	PM	Saelin	3694*	AM	2mm/hr :: 1mm/hr	2/day [d,n]	50 km :: G	N/A :: Trop
			MIMR	PM	TBD	3601	AM		1 mo	1 dg :: Global	N/A :: Sfc
Bates	Precipitation Index, Antecedent	1970								26-52 km :: Land	N/A :: Sfc
			AIRS	PM	Susskind	1969*	BM	2mm/day :: 1mm/day	2/day [d,n]	50 km :: G	N/A :: Trop
			AIRS	PM	Saelin	3694*	AM	2mm/hr :: 1mm/hr	2/day [d,n]	50 km :: G	N/A :: Trop
			MIMR	PM	TBD	3601	AM		1 mo	1 dg :: Global	N/A :: Sfc
Bates	Precipitation Rate	1958								10 km :: G	1 bl :: Sfc
			MIMR	PM	TBD	3600	BM			22 km :: Global	N/A :: Sfc
Bates	Radiative Flux, LW, Net	2173						<15 :: TBD	2/day [d,n]	50 km :: Land	N/A ::
			AIRS	PM	Gautier	2176*	BM		1/day	50 km :: Land	N/A :: Sfc
Bates	Radiative Flux, LW, Net	2174						<10 :: TBD	2/day [d,n]	50 km :: Ocean	N/A ::
			AIRS	PM	Gautier	2177*	BM		1/day	50 km :: Ocean	N/A :: Sfc
Bates	Radiative Flux, LW, Up	2191						7 W/mr ² :: <7 W/mr ²	2/day [d,n]	50 km :: G	N/A :: TOA
			CERES	TRM,AM,PM	Barkstrom	2202	BM	1/6 hr		1.25 x 1.25 dg :: G	N/A :: Sfc
			CERES	TRM,AM,PM	Barkstrom	2204	BM	5 W/mr ² :: 2 W/mr ²	1/6 hr	1.25 x 1.25 dg :: G	N/A :: TOA
			CERES	TRM,AM,PM	Barkstrom	2200	BM	3 W/mr ² :: 1 W/mr ²	1/day [Avg], 1mo [Avg]	1.25 x 1.25 dg :: G	N/A :: TOA
Bates	Sea_Ice Conc	3182							1/(3 day)	100 km :: > 60 dg/LAT	:: Sfc
			MIMR	PM	TBD	3611	BM			22 km :: Ocean/Cryo	N/A :: Sfc
Bates	Sea_Ice Cover	3148						10% :: 10%	2/day [d,n]	50 km :: Ocean/Cryo	N/A :: Sfc
			AIRS	PM	Chedin, Saelin	3151*	BM	0.1 :: 0.1	2/day [d,n]	50 km :: Ocean/Cryo	N/A :: Sfc
			MIMR	PM	TBD	3611	BM			22 km :: Ocean/Cryo	N/A :: Sfc
			MODIS	AM,PM	Salomonson	3153	AM	<=5% :: <=5%	1/day, 1/wk, 1/mo	10 km :: Ocean/Cryo	N/A :: Sfc
Bates	Sea_Ice Emissivity	2121							1/day	10 km :: Polar	N/A :: Sfc
			MODIS	AM,PM	Wan	3324*	BM	0.05 :: 0.02	1 day, 1 wk	10 km :: Land	N/A :: Sfc
			AIRS	PM	Chedin, Fleming	2113*	BM	0.05 :: 0.025	2/day [d,n]	15 x 15 - 50 x 50 km :: Land	N/A :: Sfc
Bates	Sea_Ice Temperature	2489							1/day	10 km :: Polar	N/A :: Sfc
			ASTER	AM1	Welch	3619	BM			90 m :: Ocean/Cryo	N/A :: Sfc
Bates	Sea_Level Height, Along-track	3111						10 cm ::		7 km :: Ocean	N/A :: Sfc
			ALT	ALT	Fu	3112	BM	10 cm ::		7 km :: Ocean	N/A :: Sfc
Bates	Sea_sfc Temperature (SST)	2508						0.3-0.6 K :: 0.1-0.3 K	1/day, 1/wk, 1/mo	20 km :: Ocean/G,R	N/A :: Sfc
			MODIS	AM,PM	Brown	2528	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G,R	N/A :: Sfc
			MODIS	AM,PM	Brown, Barton	2531	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G,R	N/A :: Sfc
			AIRS	PM	Chedin, Fleming	2523*	AM	0.5 - 1 K :: 0.4 - 0.5 K	2/day [d,n]	50 km :: Ocean	N/A :: Sfc

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.		Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Inst.	Platforms	Investigator	Prod #				
Bates	Sea sfc Temperature (SST)	2509	AIRS	PM	Chedin, Fleming.	2523*	0.5 K :: 0.4 K	50 km :: Ocean	50 km :: Ocean	N/A :: Sfc
			MODIS	AM,PM	Brown, Barton	2532	0.5 - 1 K :: 0.4 - 0.5 K	50 km :: Ocean	50 km :: Ocean	N/A :: Sfc
			MODIS	AM,PM	Brown	2528	0.3-0.4K :: 0.1-0.6K	50 km :: Ocean	50 km :: Ocean	N/A :: Sfc
			MODIS	AM,PM	Brown, Barton	2531	0.3-0.6K :: 0.1-0.3K	20 km :: Ocean/G,R	20 km :: Ocean/G,R	N/A :: Sfc
			MODIS	AM,PM	TBD	3603	0.3-0.6K :: 0.1-0.3K	20 km :: Ocean/G,R	20 km :: Ocean/G,R	N/A :: Sfc
			MODIS	PM	TBD	3603	0.3-0.6K :: 0.1-0.3K	60 km :: Ocean	60 km :: Ocean	N/A :: Sfc
			MODIS	PM	Saelin	3018*	0.5 - 1 K :: 0.4 - 0.5 K	50 km :: Land	50 km :: Land	N/A :: Sfc
Bates	Snow Cover	3006	MODIS	AM,PM	Salomonson	3020	<=5% :: <=5%	50 km :: Land	50 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	22 km :: Land	22 km :: Land	N/A :: Sfc
			MODIS	PM	Saelin	3018*	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
Bates	Soil Moisture	2960	MODIS	AM,PM	Salomonson	3020	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	22 km :: Land	22 km :: Land	N/A :: Sfc
Bates	Stratopause Height	1561	MODIS	AM,PM	Salomonson	3020	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	22 km :: Land	22 km :: Land	N/A :: Sfc
Bates	Temperature Profile	1569	MODIS	AM,PM	Salomonson	3020	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	22 km :: Land	22 km :: Land	N/A :: Sfc
Bates	Temperature Profile	1570	MODIS	AM,PM	Salomonson	3020	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	22 km :: Land	22 km :: Land	N/A :: Sfc
Bates	Temperature Profile	1571	MODIS	AM,PM	Salomonson	3020	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	22 km :: Land	22 km :: Land	N/A :: Sfc
Bates	Tropopause Height, Aerosol located	1642	MODIS	AM,PM	Salomonson	3020	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	22 km :: Land	22 km :: Land	N/A :: Sfc
Bates	Vegetation Evapotrans	1989	MODIS	AM,PM	Salomonson	3020	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	22 km :: Land	22 km :: Land	N/A :: Sfc
Bates	Vegetation Evapotrans	1990	MODIS	AM,PM	Salomonson	3020	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	22 km :: Land	22 km :: Land	N/A :: Sfc
Bates	Vegetation Evapotrans, Actual, (AET)	1800	MODIS	AM,PM	Salomonson	3020	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	22 km :: Land	22 km :: Land	N/A :: Sfc
Bates	Vegetation Index, Leaf Area, (LAI)	2676	MODIS	AM,PM	Salomonson	3020	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3607	<=5% :: <=5%	22 km :: Land	22 km :: Land	N/A :: Sfc

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product										Horizontal		Vertical	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Accuracy	Temporal	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.
Bates	Wind Speed, Sea_sfc	1709	MODIS	PM	TBD	3594	BM		2/day [d,n]	50 km :: Ocean	50 km :: Ocean	N/A :: Sfc		N/A :: Sfc	
Bates	Wind Stress	1742	STIKSCAT	CHEM	Freilich	1746	BM		1 mo						
			MODIS	PM	TBD	3595	BM								
			MODIS	PM	TBD	3594	AM								
Bates	Wind Velocity, Geostrophic	1685	HIRDLS	CHEM	Barnett, Gille	1687	BM	2 m/s :: 3 m/s :: 3 m/s	2/day	4 x 4 dg :: G	4 x 4 dg :: G	1-1.5 km :: Atmos			
Bates	Wind Velocity, Sea_sfc	1658	STIKSCAT	CHEM	Freilich	1680	BM	10% :: 20 dg 10% :: 10%	2/day [d,n]	25 km :: Ocean	25 km :: Ocean	N/A :: Near_sfc		N/A :: Near_sfc	
Brewer	Gelbstoff Absorption Coef@300nm	3213	HIRIS	AM2	Carder, Melack	3215	BM	50% :: 25%	1/day, 1/season	30 m :: Ocean/L	30-90 m :: Ocean-L/L	N/A :: TOO		N/A :: TOO	
Brewer	Gelbstoff Absorption Coef@300nm	3214	HIRIS	AM2	Carder, Melack	3215	BM	50% :: 25%	1/day, 1/season	20 km :: Ocean	20 km :: Ocean	N/A :: TOO		N/A :: TOO	
Brewer	Irradiance, UV Solar	2275	SOLSTICE	MO	Rotman	2278	BM	20% :: 5%	1/day, 1/season	30 m :: Ocean/L	30 m :: Ocean/L	N/A :: NA		N/A :: NA	
Brewer	Irradiance, UV Solar	2276	SOLSTICE	MO	Rotman	2277	BM	<5% :: <1%	1/hr	N/A :: N/A	N/A :: N/A	N/A :: NA		N/A :: NA	
			SOLSTICE	MO	Rotman	2278	BM	<5% :: <1%	1/hr	20 km :: Ocean	20 km :: Ocean	N/A :: NA		N/A :: NA	
			SOLSTICE	MO	Rotman	2277	BM	<5% :: <1%	1/hr	N/A :: N/A	N/A :: N/A	N/A :: NA		N/A :: NA	
			SOLSTICE	MO	Rotman	2398	AM		1/hr	2 dg :: G	2 dg :: G	1 km :: Mid_atm			
Brewer	Irradiance, Visible Solar	2279	MODIS	AM,PM	Gordon	2267	BM	20% :: 5%	1/day, 1/season	20 km :: Ocean	20 km :: Ocean	N/A :: Sfc		N/A :: Sfc	
Brewer	Irradiance, Visible Solar	2280	MODIS	AM,PM	Gordon	2267	BM	10% :: 5%	1/day [d]	1 km :: Ocean	1 km :: Ocean	N/A :: Sfc		N/A :: Sfc	
Brewer	Land_sfc Reflectance, Directional	2426	MODIS	AM,PM	Tanre, Muller	2425*	BM	20% :: 5%	1/day, 1/season	30 m :: Ocean/L	30 m :: Ocean/L	N/A :: Sfc		N/A :: Sfc	
			MODIS	AM,PM	Kaufman et al	2429	AM	15% :: 5 - 8%	1/day, 1/wk	10 km :: G,R	10 km :: G,R	N/A :: Sfc		N/A :: Sfc	
			MISR	AM	Diner	2631	AM	0.01 :: 0.005	1/day	1 km :: G	1 km :: G	N/A :: Sfc		N/A :: Sfc	
Brewer	Land_sfc Reflectance, Directional	2427	MODIS	AM,PM	Kaufman et al	2431	BM	5% :: 2%	1/(5-16 day) [d]	1.92 km :: G	1.92 km :: G	N/A :: Sfc		N/A :: Sfc	
			MISR	AM	Diner	2632	AM	3% :: 1%	1/day, 1/season	22 km :: Ocean/L	22 km :: Ocean/L	N/A :: Sfc		N/A :: Sfc	
			MODIS	AM,PM	Tanre, Muller	2425*	AM	0.01 :: 0.005	1/day	0.25 km :: G	0.25 km :: G	N/A :: Sfc		N/A :: Sfc	
Brewer	Level-1B Backscatter, STIKSCAT	2097	STIKSCAT	CHEM	Freilich	2108	BM	5% :: 2%	1/(5-16 day) [d]	240 m :: R	240 m :: R	N/A :: Sfc		N/A :: Sfc	
			HIRIS	AM2	Gerstl	2035	AM	15% :: 5 - 8%	1/day, 1/wk	10 km :: G,R	10 km :: G,R	N/A :: Sfc		N/A :: Sfc	
Brewer	Level-2 Radiance, Water-leaving	2414	STIKSCAT	CHEM	Freilich	2108	BM	5% :: 5%	1/(16 day)	30 m :: Land/L	30 m :: Land/L	N/A :: Sfc		N/A :: Sfc	
			HIRIS	AM2	Goetz	2370	BM	10% :: TBD	1/day, 1/season	25 km :: Ocean	25 km :: Ocean	N/A :: Sfc		N/A :: Sfc	
Brewer	Level-2 Radiance, Water-leaving	2415	MODIS	AM,PM	Gordon et al	2417	BM	10% :: TBD	1/day, 1/season	30 m :: Ocean/L	30 m :: Ocean/L	N/A :: TOO		N/A :: TOO	
			MODIS	AM,PM	Gordon et al	2416	AM	5% :: 5%	1/day, 1/wk, 1/mo	20 km :: Ocean/G,R	20 km :: Ocean/G,R	N/A :: Sfc		N/A :: Sfc	
Brewer	Ocean Productivity, Primary	2599	MODIS	AM,PM	Esaias	2606	AM	5% :: 5%	1/day, 1/season	1 km :: Ocean/R,L	1 km :: Ocean/R,L	N/A :: Sfc		N/A :: Sfc	
			MODIS	AM,PM	Esaias	2606	AM	50% :: <20%	1/day, 1/season	20 km :: Ocean	20 km :: Ocean	N/A :: TOO		N/A :: TOO	
Brewer	Ocean Productivity, Primary	2600	HIRIS	AM2	Davis, Melack et al	2601	BM	<35% :: 5%	1/wk, 1/mo, 1/yr	20 km :: Ocean/G,R	20 km :: Ocean/G,R	N/A :: TOO		N/A :: TOO	
Brewer	Ocean Water Attenuation Coef, Diffuse	3202	MODIS	AM,PM	Clark	2032*	BM	50% :: 5%	1/day, 1/season	30 m :: Ocean/L	30 m :: Ocean/L	N/A :: TOO		N/A :: TOO	
			MODIS	AM,PM	Clark	2032*	BM	100% :: 50%	1/(5-2 day)	30-90 m :: Ocean/L	30-90 m :: Ocean/L	N/A :: Sfc		N/A :: Sfc	
			MODIS	AM,PM	Clark	2032*	BM	25% :: TBD	1/day, 1/season	20 km :: Ocean	20 km :: Ocean	N/A :: Sfc		N/A :: Sfc	
			MODIS	AM,PM	Clark	2032*	BM	35% :: 10%	1/day, 1/wk	20 km :: Ocean-1	20 km :: Ocean-1	N/A :: TOO		N/A :: TOO	

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product				Accuracy			Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel							
Brewer	Organic Carbon Conc, Dissolved	2561	MODIS	AM,PM	Cahill	2580*	BM	100% :: 10%		1/day, 1/season		20 km :: Ocean		N/A :: TOO	
			MODIS	AM,PM	Parlow et al	2582	AM	150% :: 30%		1/day, 1/wk, 1/mo		20 km :: Ocean [Southern]		N/A :: TOO	
Brewer	Organic Carbon Conc, Dissolved	2562						100% :: 10%		1/day, 1/season		30 m :: Ocean/L		N/A :: TOO	
Brewer	Precipitation Amount	1928	HIRS	AM2	Cander, Melack	3314	BM	100% :: 50%		(>=2)/day		30-90 m :: Ocean/L+Land/Lakes		N/A :: TOO	
								2 :: TBD		1/day, 1/season		50 km :: G		N/A :: Sfc	
Brewer	Precipitation Amount	1929	AIRS	PM	Sustkind	1969*	BM	2mm/day :: 1mm/day		2/day [d.n]		50 km :: G		N/A :: Trop	
			AIRS	PM	Saelin	3694*	AM	2mm/hr :: 1mm/hr		2/day [d.n]		50 km :: G		N/A :: Trop	
Brewer	Radiative Flux, LW	2255	MIMR	PM	TBD	3600	AM	2 :: TBD				22 km :: Global		N/A :: Sfc	
			AIRS	PM	Sustkind	1969*	BM	2mm/day :: 1mm/day		2/day [d.n]		50 km :: G		N/A :: Trop	
Brewer	Radiative Flux, LW	2256	AIRS	PM	Saelin	3694*	AM	2mm/hr :: 1mm/hr		2/day [d.n]		50 km :: G		N/A :: Trop	
			MIMR	PM	TBD	3600	AM	2 :: TBD				22 km :: Global		N/A :: Sfc	
Brewer	Radiative Flux, SW	1492	CERES	TRM,AM,PM	Barkstrom	2168	BM	5 W/m ² :: 2 W/m ²		1/day [Avg], 1/mo [Avg]		1.25 x 1.25 dg :: G		N/A :: Sfc	
			CERES	TRM,AM,PM	Barkstrom	2203	BM	5 W/m ² :: <5 W/m ²		1/day [Avg], 1/mo [Avg]		1.25 x 1.25 dg :: G		N/A :: Sfc	
Brewer	Radiative Flux, SW	1493	CERES	TRM,AM,PM	Barkstrom	2182	BM	5 W/m ² :: 2 W/m ²		1/day [Avg], 1/mo [Avg]		1.25 x 1.25 dg :: G		N/A :: Sfc	
			CERES	TRM,AM,PM	Barkstrom	2168	BM	5 W/m ² :: 2 W/m ²		1/day [Avg], 1/mo [Avg]		1.25 x 1.25 dg :: G		N/A :: Sfc	
Brewer	Sea_Ice Conc	3149	CERES	TRM,AM,PM	Barkstrom	2203	BM	5 W/m ² :: <5 W/m ²		1/day [Avg], 1/mo [Avg]		1.25 x 1.25 dg :: G		N/A :: Sfc	
			CERES	TRM,AM,PM	Barkstrom	2182	BM	5 W/m ² :: 2 W/m ²		1/day [Avg], 1/mo [Avg]		1.25 x 1.25 dg :: G		N/A :: Sfc	
Brewer	Sea_Level Height	3106	AIRS	PM	Gautier	2177*	AM	<10 :: TBD		1/day		50 km :: Ocean		N/A :: Sfc	
			CERES	TRM,AM,PM	Barkstrom	2222	BM	10 W/m ² :: 2 W/m ²		1/day [Avg], 1/mo [Avg]		1.25 x 1.25 dg :: G		N/A :: Sfc	
Brewer	Sea_sfc Temperature (SST)	2510	CERES	TRM,AM,PM	Barkstrom	2248	BM	10 W/m ² :: 2 W/m ²		1/day [Avg], 1/mo [Avg]		1.25 x 1.25 dg :: G		N/A :: Sfc	
			AIRS	PM	Gautier	2233*	AM	<10 :: <5		1/day		50 km :: Ocean		N/A :: Sfc	
Brewer	Sea_sfc Temperature (SST)	2511	MIMR	PM	TBD	3611	BM	10% :: 1%		1/day, 1/season		10 km :: Ocean/Cryo		N/A :: Sfc	
			ALT	ALT	Ru	3112	BM	5% :: 1%		1/day, 1/season		22 km :: Ocean/Cryo		N/A :: Sfc	
Brewer	Sea_sfc Temperature (SST)	2510	ALT	ALT	Ru	3108	BM	10 cm ::		1/(16 day)		7 km :: Ocean		N/A :: Sfc	
			ASTER	AM1	Welch	3620	BM	5 cm et al ::		1/day, 1/season		25 km :: Ocean		N/A :: Sfc	
Brewer	Sea_sfc Temperature (SST)	2511	MODIS	AM,PM	Brown	2528	BM	0.5 K :: 0.5 K		1/day, 1/season		30 m :: Ocean/L		N/A :: Sfc	
			MODIS	AM,PM	Brown, Barton	2531	BM	0.3-0.6K :: 0.1-0.3K		1/day, 1/season		90 m :: Ocean/Cryo		N/A :: Sfc	
Brewer	Wind Speed, Sea_sfc	1710	AIRS	PM	Chedin, Fleming	2523*	AM	0.3-0.6K :: 0.1-0.3K		1/day, 1/wk, 1/mo		20 km :: Ocean/G,R		N/A :: Sfc	
			MODIS	AM,PM	Brown	2529	AM	0.5 - 1 K :: 0.4 - 0.5 K		2/day [d.n]		20 km :: Ocean/G,R		N/A :: Sfc	
Brewer	Wind Speed, Sea_sfc	1710	MODIS	AM,PM	Cander	2580*	AM	0.3-0.6K :: 0.1-0.3K		1/day, 1/wk, 1/mo		4 km :: Ocean/R,L		N/A :: Sfc	
			MIMR	PM	TBD	3594	BM	150% :: 30%		1/day, 1/season		25 km :: Ocean		N/A :: TOO	
Brewer	Wind Speed, Sea_sfc	1710	AIRS	PM	Aumann	1718*	AM	15% :: 5%		1/day		25 km :: Ocean		N/A :: Sfc	
												30 km :: Ocean		N/A :: Sfc	

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product			Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	
Cihlar	Land_gfc Emissivity, LW (8-12u)	3487	AIRS	PM	Chedin, Fleming	2113*	BM	0.025 :: 0.025
			MODIS	AM,PM	Barton	2111*	BM	0.05 :: 0.025
			MODIS	AM,PM	Wan	3324*	BM	0.01 :: 0.01
			MODIS	AM,PM	Barton	2110*	AM	0.05 :: 0.02
			ASTER	AM1	Kahle, Becker, Ch	2124	AM	0.01 :: 0.01
			MODIS	AM,PM	Wan	3323*	AM	0.05-0.1 :: 0.005
			MODIS	AM,PM	Kaufman et al	2431	BM	0.05 :: 0.02
			MODIS	AM,PM	Tanre	2268*	BM	0.05 :: 0.001
			MODIS	AM,PM	Susskind	1969*	BM	0.01 :: 0.005
			MODIS	AM,PM	Saelin	3694*	BM	10% :: 1%
Cihlar	PAR, Intercepted, Vegetation, (IPAR)	3498	MODIS	AM,PM	Tanre	2268*	BM	200 :: 5 - 20%
			AIRS	PM	Susskind	1969*	BM	0.1 mm :: 0.1 mm
			AIRS	PM	Saelin	3694*	BM	2mm/day :: 1mm/day
			MIMR	PM	TBD	3601	AM	2mm/hr :: 1mm/hr
			AIRS	PM	Susskind	1969*	AM	10% :: 10%
			AIRS	PM	Saelin	3694*	AM	2mm/day :: 1mm/day
			MODIS	AM,PM	Tanre	2268*	BM	2mm/hr :: 1mm/hr
			MODIS	AM,PM	Huete	2047	BM	10% :: 10%
			MIMR	PM	TBD	3605	AM	5% :: 5%
			ASTER	AM1	Schmugge	1791	BM	10% :: 20%
Cihlar	Snow Water Equivalent	3491	MODIS	AM,PM	Phalocanti et al	2378	BM	5% :: 10%
			MODIS	AM,PM	Gordon	2345	BM	TBD :: 0.065-0.085
			ASTER	AM1	Kahle, JGI	2828	AM	10% :: 5%
			MISR	AM	Diner	2846*	AM	5-10 m ::
			ASTER	AM1	Schmugge	1791	BM	>50 m :: >30 m
			MODIS	AM,PM	Running	2680*	BM	100 m :: 100 m
			MODIS	AM,PM	Tanre, Muller	2424*	BM	20% :: 5-20%
			MODIS	AM,PM	Kaufman et al	2429	BM	1 mm/day :: 0.5 mm/day
			MODIS	AM,PM	Kaufman et al	2430	BM	10% :: 1%
			MODIS	AM,PM	Kaufman et al	2431	BM	0.1-0.25 :: 5-20%
Cihlar	Vegetation Evapotrans	3497	MODIS	AM,PM	Muller, Strahler	2434	BM	0.05 :: 0.001
			MODIS	AM,PM	Tanre, Muller	2424*	BM	0.05 :: 0.001
			MODIS	AM,PM	Kaufman et al	2429	BM	15% :: 5 - 8%
			MODIS	AM,PM	Kaufman et al	2430	BM	0.01 :: 0.005
			MODIS	AM,PM	Kaufman et al	2431	BM	0.01 :: 0.005
			MODIS	AM,PM	Muller, Strahler	2434	BM	0.01 :: 0.005
			MODIS	AM,PM	Tanre, Muller	2424*	BM	5% :: 3%
			MODIS	AM,PM	Kaufman et al	2429	BM	0.05 :: 0.001
			MODIS	AM,PM	Kaufman et al	2430	BM	0.01 :: 0.005
			MODIS	AM,PM	Kaufman et al	2431	BM	0.01 :: 0.005
Cihlar	Vegetation Index, Leaf Area, (LAI)	3499	MODIS	AM,PM	Running	2680*	BM	0.05 :: 0.001
			MODIS	AM,PM	Tanre, Muller	2424*	BM	0.05 :: 0.001
			MODIS	AM,PM	Kaufman et al	2429	BM	15% :: 5 - 8%
			MODIS	AM,PM	Kaufman et al	2430	BM	0.01 :: 0.005
			MODIS	AM,PM	Kaufman et al	2431	BM	0.01 :: 0.005
			MODIS	AM,PM	Muller, Strahler	2434	BM	0.01 :: 0.005
			MODIS	AM,PM	Tanre, Muller	2424*	BM	5% :: 3%
			MODIS	AM,PM	Kaufman et al	2429	BM	0.05 :: 0.001
			MODIS	AM,PM	Kaufman et al	2430	BM	0.01 :: 0.005
			MODIS	AM,PM	Kaufman et al	2431	BM	0.01 :: 0.005
Cihlar	Vegetation Reflectance, Bi-directional, (BRF)	3496	MODIS	AM,PM	Running	2680*	BM	0.05 :: 0.001
			MODIS	AM,PM	Tanre, Muller	2424*	BM	0.05 :: 0.001
			MODIS	AM,PM	Kaufman et al	2429	BM	15% :: 5 - 8%
			MODIS	AM,PM	Kaufman et al	2430	BM	0.01 :: 0.005
			MODIS	AM,PM	Kaufman et al	2431	BM	0.01 :: 0.005
			MODIS	AM,PM	Muller, Strahler	2434	BM	0.01 :: 0.005
			MODIS	AM,PM	Tanre, Muller	2424*	BM	5% :: 3%
			MODIS	AM,PM	Kaufman et al	2429	BM	0.05 :: 0.001
			MODIS	AM,PM	Kaufman et al	2430	BM	0.01 :: 0.005
			MODIS	AM,PM	Kaufman et al	2431	BM	0.01 :: 0.005
Cihlar	Vegetation Structure	3502	MODIS	AM,PM	Running	2680*	BM	0.05 :: 0.001
			MODIS	AM,PM	Tanre, Muller	2424*	BM	0.05 :: 0.001
			MODIS	AM,PM	Kaufman et al	2429	BM	15% :: 5 - 8%
			MODIS	AM,PM	Kaufman et al	2430	BM	0.01 :: 0.005
			MODIS	AM,PM	Kaufman et al	2431	BM	0.01 :: 0.005
			MODIS	AM,PM	Muller, Strahler	2434	BM	0.01 :: 0.005
			MODIS	AM,PM	Tanre, Muller	2424*	BM	5% :: 3%
			MODIS	AM,PM	Kaufman et al	2429	BM	0.05 :: 0.001
			MODIS	AM,PM	Kaufman et al	2430	BM	0.01 :: 0.005
			MODIS	AM,PM	Kaufman et al	2431	BM	0.01 :: 0.005

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.		Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match			
Cibler	Vegetation Temperature	3503	MODIS	AM,PM	Wan	2484	BM	250-1000 m :: Canada/R	1 km :: Land/R	N/A :: Sfc
			ASTER	AM1	Kahle, Becker, O	2483	BM	90 m :: Land	90 m :: Land	N/A :: Sfc
Cibler	Vegetation Type	3504	HIRIS	AM2	Westman	2644	BM	100 m :: Canada/R	100 m :: Land	N/A :: Sfc
			HIRIS	AM2	Wain et al	2746	AM	30 m :: Land/L	30 m :: Land/L	N/A :: Sfc
			ASTER	AM1	Gillespie	2747*	AM	15 m :: Land/R,L	15 m :: Land/R,L	N/A :: Sfc
			MODIS	AM,PM	Justice, Huete et al	2750	AM	0.5 km :: Land/R	0.5 km :: Land/R	N/A :: Sfc
Dickinson	Aerosol Backscatter	3368						<0.5-1 deg :: G		
Dickinson	Aerosol Extinction	3374	MODIS	AM,PM	Gordon	2345	BM	10% :: 5%	1/day, 1/wk, 1/mo	N/A :: Atmos
Dickinson	Albedo, Cloud	3361	SAGE-III	AERO,CHEM	McCormick	1012	BM	5% :: 5%	1/(2 min), 30/day	1 km :: 0.40 km
Dickinson	Albedo, Land, sfc	3363	HIRIS	AM2	Welch	2008	BM	5% :: 5%	90 m :: R	:: Cloud
Dickinson	Albedo, Sea_Ice	3362	MODIS	AM,PM	Tanre, Muller	2016*	BM	15% :: 5 - 8%	1/day, 1/wk	N/A :: Sfc
			AIRS	PM	Gautier 77	2000*	BM	15% :: 5 - 8%	1/day	N/A :: Sfc
			MODIS	AM,PM	Tanre, Muller	2015*	AM	15% :: 5 - 8%	1/day, 1/wk	N/A :: Sfc
			ASTER	AM1	Welch	3624	BM	<0.5-1 deg :: Ocean/Cryo		N/A :: Sfc
Dickinson	Albedo, Snow	3364	HIRIS	AM2	Dozier	2440	BM	5% :: 1%	1/wk, 1/mo	N/A :: Sfc
Dickinson	Albedo, TOA	3365	MISR	AM	Diner	2011	BM	<0.03 :: 0.01	1/(5-16 day) [d]	N/A :: TOA
Dickinson	Albedo, Vegetation	3366	MODIS	AM,PM	Muller, Strahler,	3667*	BM	5% :: 3%	1/day	N/A :: TOA
			MISR	AM	Diner	3679	AM	<0.03 :: 0.01	9,16 day; mo; seas; yr	N/A :: TOA
			MISR	AM	Diner	2021*	BM	<0.03 :: 0.01	1/(5-16 day) [d]	N/A :: Sfc
			MISR	AM	Diner	2022	BM	<0.03 :: 0.01	1/(5-16 day) [d]	N/A :: Sfc
Dickinson	CO Conc	3325	MODIS	AM,PM	Muller, Strahler,	3665*	BM	5% :: 3%	1/day	N/A :: Sfc
			MODIS	AM,PM	Tanre, Muller	2015*	BM	15% :: 5 - 8%	1/day, 1/wk	N/A :: Sfc
			MOPITT	AM1	Drummond	1126	BM	:: 10%	1/(0.4 s) [?] 1/(16 day)	3-4 km :: 0.15 km
			TES	CHEM	Beer	1129	AM	:: 3 ppb		4-6 km :: 0.12 km
Dickinson	Cloud Cover	3343	MODIS	AM,PM	Salomonson?	3641	BM	10% :: 5%	1/mo (day & night)	N/A :: Cloud
			ASTER	AM1	Welch	2080	BM	3% :: 3%	1/(16 day)	N/A :: Cloud
			MODIS	AM,PM	King	2081	BM	10% :: 5%	2/day [d,n], 1/mo	N/A :: Cloud
			CERES	TRM,AM,PM	Barkstrom	2086	BM	5% :: 2%	6/day [d,n]	N/A :: Atmos
Dickinson	Cloud Cover	3344	MODIS	AM,PM	King	2081	BM	10% :: 5%	2/day [d,n], 1/mo	N/A :: Cloud
			CERES	TRM,AM,PM	Barkstrom	2086	BM	5% :: 2%	6/day [d,n]	N/A :: Atmos
			CERES	TRM,AM,PM	Barkstrom	2088	BM	5% :: 2%	1/day [Avg], 1/mo [Avg]	N/A :: Atmos
			MODIS	AM,PM	King	2082	BM	10% :: 5%	1/day, 1/mo	N/A :: Cloud
Dickinson	Cloud Drop Phase	3346	MODIS	AM,PM	King, Menzel	1765	BM	90% Conf :: 90% Conf	1/day, 1/mo	N/A :: Cloud
			CERES	TRM,AM,PM	Barkstrom	1768	BM	90% Conf :: 90% Conf	6/day [d,n]	N/A :: Atmos

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product			Accuracy		Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel	1/day [Avg], 1/mo [Avg]	1/day [d]	1.25 x 1.25 dg :: G	N/A :: Atmos
Dickinson	Cloud Drop Phase	3346	CERES	TRM,AM,PM	Barkstrom	1767	AM	90% Conf :: 90% Conf	1/day [Avg], 1/mo [Avg]	1/day [d]	1.25 x 1.25 dg :: G	N/A :: Cloud
Dickinson	Cloud Drop Size	3347	EOSP	AERO,AM2	Travis	1770	AM	:: 95% Corr			<0.5-1 deg :: G	
			EOSP	AERO,AM2	Travis	1774	BM	25% :: 25%	1/day [d]	1/day [d]	100 km :: G	N/A :: Cloud
			CERES	TRM,AM,PM	Barkstrom	1784	BM	30% :: 10%	6/day [d,n]	6/day [d,n]	25 km :: G	N/A :: Atmos
			MODIS	AM,PM	King, Menzel	1781	AM	0-40% :: 5%	1/day, 1/mo	1/day, 1/mo	1 dg :: G	N/A :: Cloud
			MODIS	AM,PM	King, Menzel	1780	AM	0-40% :: 5%	1/day	1/day	5 km :: G	N/A :: Cloud
			CERES	TRM,AM,PM	Barkstrom	1783	AM	30% :: 10%	1/day [Avg], 1/mo [Avg]	1/day [d]	1.25 x 1.25 dg :: G	N/A :: Atmos
Dickinson	Cloud Drop Size-distribution	3348	HIRIS	AM2	Welch	1776	BM	20% :: 10%	1/(2-16 day)	1/(2-16 day)	30 m :: L	:: Cloud
			ASTER	AM1	Welch	3627	BM		1/(16 day)	1/(16 day)	90 m :: L	N/A :: Cloud
Dickinson	Cloud Emissivity	3372	MODIS	AM,PM	Menzel	2126	BM	0.10 :: 0.05	2/day	2/day	<0.5-1 deg :: G	N/A :: Cloud
			MODIS	AM,PM	Menzel	2127	BM	0.10 :: 0.05	1/day, 1/mo	1/day, 1/mo	1 dg :: G	N/A :: Cloud
			AIRS	PM	Chahine, Smith	2128*	BM	0.05 :: 0.025	2/day [d,n]	2/day [d,n]	15 x 15 - 15 x 45 km :: G	N/A :: Cloud
Dickinson	Cloud Height, Base	3342										
			CERES	TRM,AM,PM	Barkstrom	1395	BM	1.0 km :: 0.1 km	1/day [Avg], 1/mo [Avg]	1/day [d]	1.25 x 1.25 dg :: G	0.1 km :: Atmos
Dickinson	Cloud Height, Top	3349										
			CERES	TRM,AM,PM	Barkstrom	1430	BM	1.0 km :: 0.1 km	1/day [Avg], 1/mo [Avg]	1/day [d]	1.25 x 1.25 dg :: G	0.1 km :: Atmos
			MISR	AM	Diner	1432*	BM	<1000 m :: <1000 m	1/(5-16 day) [d]	1/(5-16 day) [d]	5 km :: G	N/A :: Trop
			AIRS	PM	Chahine, Chedin,	1423*	AM	0.5 km :: 0.25 km	2/day [d,n]	2/day [d,n]	15 x 15 - 50 x 50 km :: G	N/A :: Cloud
			CERES	TRM,AM,PM	Barkstrom	1429	AM	1.0 km :: 0.1 km	6/day [d,n]	6/day [d,n]	25 km :: G	0.1 km :: Atmos
Dickinson	Cloud Liq-water Content	3357										
			CERES	TRM,AM,PM	Barkstrom	1896	BM	75% :: 10%	6/day [d,n]	6/day [d,n]	25 km :: G	lyr :: Atmos
			CERES	TRM,AM,PM	Barkstrom	1897	BM	75% :: 10%	1/day [Avg], 1/mo [Avg]	1/day [d]	1.25 x 1.25 dg :: G	lyr :: Atmos
			MIMR	PM	TBD	3598	AM				22 km :: Ocean	N/A :: Trop
			MLS	MO	Waters	1898	AM	:: 5%	1/day [z, mean]	1/day [z, mean]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: Upper Trop
Dickinson	Cloud Liq-water Content	3358										
			AIRS	PM	Rosenkranz	1908*	BM	0.1 :: 0.1	2/day [d,n]	2/day [d,n]	50 km :: G	N/A :: Cloud
Dickinson	Cloud Optical Depth, LW	3381										
			CERES	TRM,AM,PM	Barkstrom	2316	BM	25% :: 10%	6/day [d,n]	6/day [d,n]	25 km :: G	N/A :: Atmos
			CERES	TRM,AM,PM	Barkstrom	2317	AM	10% :: 5%	1/day [Avg], 1/mo [Avg]	1/day [d]	1.25 dg :: G	N/A :: Atmos
			CERES	TRM,AM,PM	Barkstrom	2318	AM	25% :: 5%	1/(6 hr)	1/(6 hr)	1.25 dg :: G	N/A :: Atmos
Dickinson	Cloud Optical Depth, SW	3382										
			CERES	TRM,AM,PM	Barkstrom	2321	BM	25% :: 10%	3/day [d]	3/day [d]	25 km :: G	N/A :: Atmos
			MODIS	AM,PM	King	2312	BM	20% :: 10%	1/day, 1/mo	1/day, 1/mo	1 dg :: G	N/A :: Cloud
			CERES	TRM,AM,PM	Barkstrom	2322	AM	10% :: 5%	1/day [Avg], 1/mo [Avg]	1/day [d]	1.25 dg :: G	N/A :: Atmos
			MODIS	AM,PM	King	2311	AM	20% :: 10%	1/day [d]	1/day [d]	5 km :: G	N/A :: Cloud
			EOSP	AERO,AM2	Travis	2313	AM	20% :: 10%	1/day [d]	1/day [d]	40 km :: G	Column :: Cloud
			GLRS-A	ALT	Spinhrne et al	2308	AM	0.1 ::			2-200 km :: G	N/A :: Cloud
			AIRS	PM	Smith, Gautier ??	3684*	AM	TBD :: TBD	1/day	1/day	15 x 15 - 15 x 45 km :: G	N/A :: Cloud
Dickinson	Cloud Pressure, Top	3330										
			MODIS	AM,PM	Menzel	1528	BM	50 mb :: 20 mb	2/day	2/day	5 km :: G	N/A :: Cloud
			EOSP	AERO,AM2	Travis	1530	AM	30 mb :: 30 mb	1/day [d]	1/day [d]	40 km :: G	30 mb :: Cloud
			HIRDLS	CHEM	Barnett, Gille	1531	AM	5-10% :: 5-10%	2/day [d,n]	2/day [d,n]	4 x 4 dg :: G	0.4 km :: Trop
			MODIS	AM,PM	Menzel	1529	AM	50 mb :: 20 mb	1/day, 1/mo	1/day, 1/mo	1 dg :: G	N/A :: Cloud

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product				Accuracy			Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel							
Dickinson	Cloud Temperature, Emission	3386	AIRS	PM	Chahine, Chedin,	2463	BM	1 K :: 0.5 K		2/day [d.n]		<0.5-1 deg :: G		N/A :: Cloud	
Dickinson	Cloud Temperature, Top	3387	MODIS	AM,PM	Menzel	2466	BM	2 C :: 1 C		1/day, 1/mo		<0.5-1 deg :: G		N/A :: Cloud	
			AIRS	PM	Chahine, Chedin,	2463	BM	1 K :: 0.5 K		2/day [d.n]		15 x 15 - 50 x 50 km :: G		N/A :: Cloud	
Dickinson	Cloud Transmissivity	3396	MODIS	AM,PM	Menzel	2467	AM	2 C :: 1 C		2/day		5 km :: G		N/A :: Cloud	
												<0.5-1 deg :: G			
AIRS				PM	Chahine	3685*	BM	TBD :: TBD		2/day [d.n]		15 x 45 km :: G		N/A :: Cloud	
Dickinson	Evaporation, Land_sfc	3350	ASTER	AM1	Schmugge	1791	BM	1 mm/day :: 0.5 mm/day				<0.5-1 deg :: G		N/A :: Sfc	
Dickinson	Fire Extent	3398	MODIS	AM,PM	Kaufman, Justice	2666	BM			1/day, 1/wk		90 m :: Land/R/L		N/A :: Sfc	
Dickinson	Humidity Profile	3353										<0.5-1 deg :: G			
			AIRS	PM	Chedin, Fleming,	1828	BM	10% :: 5%		2/day [d.n]		15 x 50 - 50 x 50 km :: G		2 km :: Atmos	
Dickinson	Humidity, Near_sfc	3354	AIRS	PM	Chedin, Fleming,	1828	BM	10% :: 5%		2/day [d.n]		<0.5-1 deg :: G		N/A :: Near_sfc	
Dickinson	Ice_Sheet Temperature	3388										15 x 50 - 50 x 50 km :: G		2 km :: Atmos	
			MODIS	AM,PM	Wan	2485	BM	1-3 C :: 1 C		1/day, 1/wk		<0.5-1 deg :: Land/Cryo			
Dickinson	Irradiance, Incident, Sfc	3364	AIRS	PM	Chedin, Fleming,	2481	AM	1.0 K :: 0.5 K		2/day [d.n]		10 km :: Land		N/A :: Sfc	
												50 km :: Land		N/A :: Sfc	
			CERES	TRM,AM,PM	Barkstrom	2221	BM	15 W/m ² :: 2 W/m ²		3/day [d]		<0.5-1 deg :: G		N/A :: Sfc	
			CERES	TRM,AM,PM	Barkstrom	2222	BM	10 W/m ² :: 2 W/m ²		1/day [Avg], 1/mo [Avg]		1.25 x 1.25 deg :: G		N/A :: Sfc	
			CERES	TRM,AM,PM	Barkstrom	2223	BM	15 W/m ² :: 2 W/m ²		1/6 hr		1.25 x 1.25 deg :: G		N/A :: Sfc	
Dickinson	Land_sfc Emisivity	3373	MODIS	AM,PM	Barton	2111*	BM	0.01 :: 0.01		1/day, 1/wk		<0.5-1 deg :: Land		N/A :: Sfc	
			MODIS	AM,PM	Wan	3324*	BM	0.05 :: 0.02		1/day, 1 wk		10 km :: Land		N/A :: Sfc	
Dickinson	Land_sfc Reflectance, Bi-directional, (BRDF)	3369	MODIS	AM,PM	Tanre, Muller	2425*	BM	15% :: 5 - 8%		1/day, 1/wk		<0.5-1 deg :: G		N/A :: Sfc	
			MISR	AM	Diner	2631	AM	5% :: 2%		1/(5-16 day) [d]		10 km :: G/R		N/A :: Sfc	
			MODIS	AM,PM	Muller, Strahler,	3669*	AM	5% :: 3%		1/day		1 km :: Land/R		N/A :: Sfc	
Dickinson	Land_sfc Temperature	3389	ASTER	AM1	Kahle, Becker, Ch	2483	BM	1-6 K :: 0.3 K		1/(2-16 day)		High res :: Land		N/A :: Sfc	
Dickinson	Land_sfc Temperature	3390	AIRS	PM	Chedin, Fleming,	2481	BM	1.0 K :: 0.5 K		2/day [d.n]		90 m :: Land		N/A :: Sfc	
Dickinson	Land_sfc Temperature	3391	MODIS	AM,PM	Wan	2484	BM	1 C :: 1 C		1/day, 1/wk		Low res :: Land		N/A :: Sfc	
			MODIS	AM,PM	Wan	2485	BM	1-3 C :: 1 C		1/day, 1/wk		Med res :: Land		N/A :: Sfc	
Dickinson	Land_sfc Temperature-Difference, Day-Night	3395	MODIS	AM,PM	Huee	2537*	BM	1 K :: 1 K		1/day		<0.5-1 deg :: G		N/A :: Sfc	
			AIRS	PM	Chedin, Fleming,	2539*	BM	0.5 K :: 0.25 K		2/day [d.n]		856 m :: R		N/A :: Sfc	
			ASTER	AM1	Kieffer et al	2540	AM	1-2 K :: 0.3 K				50 km :: G		N/A :: Sfc	
Dickinson	Lightning Intensity	3340	LIS	TRM	Christian	3643	BM					90 m :: Land/R/L		N/A :: Sfc	
			LIS	TRM	Christian	1756	BM					<0.5-1 deg :: G		N/A :: Sfc	
Dickinson	Lightning Rate	3341	LIS	TRM	Christian	1756	BM					.07 dg :: G		N/A :: Atmos	
												.07 dg :: G		N/A :: Atmos	
												<0.5-1 deg :: G		N/A :: Atmos	
												.07 dg :: G		N/A :: Atmos	
												<0.5-1 deg :: G		N/A :: Atmos	

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match		
Dickinson	Optical Depth, Total	3383	CERES	TRM,AM,PM	Barkstrom	2321	BM	25 km :: G	N/A :: Atmos
			MODIS	AM,PM	King	2312	BM	1 dg :: G	N/A :: Cloud
			MODIS	AM,PM	Kaufman, Tanne	2293	BM	0.5 dg :: Land	N/A :: Atmos
			CERES	TRM,AM,PM	Barkstrom	2316	AM	25 km :: G	N/A :: Atmos
			CERES	TRM,AM,PM	Barkstrom	2321	AM	25 km :: G	N/A :: Atmos
			CERES	TRM,AM,PM	Barkstrom	2317	AM	1/day [Avg], 1/mo [Avg]	N/A :: Atmos
			CERES	TRM,AM,PM	Barkstrom	2322	AM	1/day [Avg], 1/mo [Avg]	N/A :: Atmos
			MISR	AM	Diner	2299	AM	1/5-16 day [d]	Column :: Atmos
			GLRS-A	ALT	Spinthorne et al	1514	BM	2-200 km :: G	75 m :: Trop
			MODIS	AM,PM	Kaufman, Tanne	3322	BM	<0.5-1 deg :: G	N/A :: Atmos
Dickinson	Precipitable Water	3355	AIRS	PM	Chedin, Fleming	1869	BM	50 km :: G	N/A :: Trop
			MIMR	PM	TBD	3600	BM	<0.5-1 deg :: G	N/A :: Sfc
			MIMR	PM	TBD	3601	BM	1 dg :: Global	N/A :: Sfc
Dickinson	Radiative Flux, LW, Down	3375	CERES	TRM,AM,PM	Barkstrom	2168	BM	1/day [Avg], 1/mo [Avg]	N/A :: Sfc
			CERES	TRM,AM,PM	Barkstrom	2169	BM	6/day [d,n]	N/A :: Sfc
			CERES	TRM,AM,PM	Barkstrom	2170	BM	1/6 hr	N/A :: Sfc
			CERES	TRM,AM,PM	Barkstrom	2182	BM	1/day [Avg], 1/mo [Avg]	N/A :: Sfc
			AIRS	PM	Gautier	2176*	AM	50 km :: Land	N/A :: Sfc
Dickinson	Radiative Flux, LW, Net	3376	AIRS	PM	Gautier	2177*	AM	50 km :: Ocean	N/A :: Sfc
			CERES	TRM,AM,PM	Barkstrom	2180	AM	1/day [d,n]	N/A :: Sfc
			CERES	TRM,AM,PM	Barkstrom	2181	AM	1/6 hr	N/A :: Sfc
			CERES	TRM,AM,PM	Barkstrom	2200	BM	1/day [Avg], 1/mo [Avg]	N/A :: TOA
			CERES	TRM,AM,PM	Barkstrom	2202	BM	1/6 hr	N/A :: TOA
Dickinson	Radiative Flux, SW, Net	3379	CERES	TRM,AM,PM	Barkstrom	2230	BM	1/day [Avg], 1/mo [Avg]	N/A :: Sfc
			AIRS	PM	Gautier	2232*	AM	50 km :: Land	N/A :: Sfc
			AIRS	PM	Gautier	2233*	AM	50 km :: Ocean	N/A :: Sfc
			CERES	TRM,AM,PM	Barkstrom	2229	AM	3/day [d]	N/A :: Sfc
			CERES	TRM,AM,PM	Barkstrom	2231	AM	1/6 hr	N/A :: Sfc
Dickinson	Sea Ice Cover	3417	CERES	TRM,AM,PM	Barkstrom	2251	BM	1/day [Avg], 1/mo [Avg]	N/A :: Sfc
			MIMR	PM	TBD	3611	BM	<0.5-1 deg :: Ocean/Cryo	N/A :: TOA
			MODIS	AM,PM	Brown, Barton	2532	BM	22 km :: Ocean/Cryo	N/A :: Sfc
Dickinson	Sea Surface Temperature (SST)	3392	MODIS	AM,PM	Brown, Barton	2531	AM	50 km :: Ocean	N/A :: Sfc
			MODIS	AM,PM	Brown, Barton	2530	AM	20 km :: Ocean/G, R	N/A :: Sfc
			MODIS	AM,PM	Brown, Barton	2530	AM	4 km :: Ocean/R, L	N/A :: Sfc
			AIRS	PM	Chedin, Fleming	2523*	AM	50 km :: Ocean	N/A :: Sfc

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product					Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #				
Dickinson	Sea_gfc.Temperature (SST)	3393	MIMR	PM	TBD	3603			<0.5-1 deg :: Ocean	N/A :: Sfc
Dickinson	Snow Extent	3415	MIMR	PM	TBD	3604	1 K ::	1 mo	60 km :: Ocean	N/A :: Sfc
Dickinson	Snow Extent	3416	AIRS	PM	Saelin	3018*			Low res :: Land	N/A :: Sfc
Dickinson	Snow Extent	3416	MODIS	AM,PM	Salomonson	3020	<=5% :: <=5%	2/day [d,n] 1/day, 1/wk	50 km :: Land 10 km :: Land	N/A :: Sfc N/A :: Sfc
Dickinson	Soil Extent	3409	MODIS	AM,PM	Salomonson	3021	<=5% :: <=5%	1/day, 1/wk	Med res :: Land 1 km :: Land/R	N/A :: Sfc
Dickinson	Soil Moisture	3411	ASTER	AM1	Kahle, Gillespie	2803*		50 maps/mission	Low res :: Land 90 m :: Land/R,L	N/A :: Sfc
Dickinson	Soil Moisture	3412	MIMR	PM	TBD	3605			Low res :: Land	N/A :: Sfc
Dickinson	Soil Moisture	3412	MIMR	PM	TBD	3606		1 mo	60 km :: Land 1 dg :: Land	N/A :: Sfc N/A :: Sfc
Dickinson	Soil Moisture	3412	MIMR	PM	TBD	3605			Med res :: Land 60 km :: Land	N/A :: Sfc
Dickinson	Soil Reflectance, Bi-directional, (BRDF)	3370	MODIS	AM,PM	Torre, Muller	2425*	15% :: 5 - 8%	1/day, 1/wk	<0.5-1 deg :: Land 10 km :: G,R	N/A :: Sfc
Dickinson	Soil Roughness	3331	MISR	AM	Diner	2631	5% :: 2%	1/(5-16 day) [d]	1.92 km :: G	N/A :: Sfc
Dickinson	Soil Roughness	3332	MODIS	AM,PM	Muller, Strahler, 1	3669*	5% :: 3%	1/day	1 km :: Land/R	N/A :: Sfc
Dickinson	Temperature	3333	MODIS	AM,PM	Torre, Muller	1556*	15% :: 5 - 8%	1/day, 1/wk	High res :: Land 1 km :: G,R	N/A :: Sfc
Dickinson	Temperature, Near_gfc	3334	MODIS	AM,PM	Torre, Muller	1557*	15% :: 5 - 8%	1/day, 1/wk	Low res :: Land 10 km :: G,R	N/A :: Sfc
Dickinson	Topographic Elevation, Land_gfc	3410	AIRS	PM	Chedin, Fleming,	1588	1.0 K :: 0.4 K	2/day [d,n]	<0.5-1 deg :: G 15 x 50 - 50 x 50 km :: G	1, 2 km :: Atmos
Dickinson	Vegetation Biomass, Green	3397	AIRS	PM	Chedin, Fleming,	1588	1.0 K :: 0.4 K	2/day [d,n]	<0.5-1 deg :: G 15 x 50 - 50 x 50 km :: G	1, 2 km :: Atmos
Dickinson	Vegetation Evapotrans	3351	AIRS	PM	Chedin, Fleming,	2481	1.0 K :: 0.5 K	2/day [d,n]	50 km :: Land Low res :: Land	N/A :: Sfc
Dickinson	Vegetation Evapotrans	3352	MISR	AM	Diner	2846*	100 m :: 100 m	1/mission	500 m :: Land 15 m :: Land/R,L	N/A :: Sfc
Dickinson	Vegetation Evapotrans	3352	ASTER	AM1	Kahle, JGI	2828	>50 m :: >30 m	1/mission	<0.5-1 deg :: Land 30 m :: Land/L	N/A :: Sfc
Dickinson	Vegetation Extent	3400	HIRIS	AM2	Ustin, Weisman	2620	30% :: 15%	1/(2-16 day)	High res :: Land 90 m :: Land/R,L	N/A :: Sfc
Dickinson	Vegetation Extent	3401	ASTER	AM1	Schmugge	1791	1 mm/day :: 0.5 mm/day		Med res :: Land 90 m :: Land/R,L	N/A :: Sfc
Dickinson	Vegetation Extent	3401	ASTER	AM1	Schmugge	1791	1 mm/day :: 0.5 mm/day		Med res :: Land 90 m :: Land/R,L	N/A :: Sfc
Dickinson	Vegetation Extent	3401	HIRIS	AM2	Ustin, Weisman	2741	20% :: 10%	1/(2-16 day)	High res :: Land 30 m :: Land/L	N/A :: Sfc
Dickinson	Vegetation Extent	3401	ASTER	AM1	Gillespie	2747*	10% :: 10%	1/(2-16 day)	15 m :: Land/R,L 30 m :: Land/L	N/A :: Sfc N/A :: Sfc
Dickinson	Vegetation Extent	3401	HIRIS	AM2	Weisman	2644	10% :: 10%	1/(2-16 day)	Med-low res :: Land 1 km :: Land	N/A :: Sfc
Dickinson	Vegetation Extent	3401	MODIS	AM,PM	Strahler, Huete et	2669	10% :: 5%	1/mo, 1/yeas	1 km :: Land 1 km :: Land/R	N/A :: Sfc
Dickinson	Vegetation Extent	3401	MODIS	AM,PM	Justice, Huete et	2751	0.01 :: 0.01	1/day, 1/wk, 1/mo	5 km :: Land 10 km :: Land	N/A :: Sfc
Dickinson	Vegetation Extent	3401	MODIS	AM,PM	Strahler, Huete et	2670	10% :: 5%	1/mo, 1/yeas	5 km :: Land 10 km :: Land	N/A :: Sfc
Dickinson	Vegetation Extent	3401	MODIS	AM,PM	Justice, Huete et	2749	0.01 :: 0.01	1/day, 1/wk, 1/mo	10 km :: Land	N/A :: Sfc

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match		
Dickinson	Vegetation Height	3402	HIRIS	AM2	Ustin	2656	BM	Med-low res :: Land 30 m :: Land/L	N/A :: Sfc
Dickinson	Vegetation Index, Leaf Area, (LAI)	3406	MODIS	AM,PM	Running	2680*	BM	Low res :: Land pixel_size :: Land/G,R,L	N/A :: N/A
Dickinson	Vegetation Reflectance, Bi-directional, (BR 3371)		MODIS					<0.5-1 deg :: Land	
Dickinson	Vegetation Roughness	3404	MODIS	AM,PM	Tanre, Muller	2425*	BM	10 km :: G,R	N/A :: Sfc
			MISR	AM	Diner	2631	AM	1 km :: G	N/A :: Sfc
			MODIS	AM,PM	Muller, Strahler,	3669*	AM	1 km :: Land/R	N/A :: Sfc
			MODIS	AM,PM	Tanre, Muller	1557*	BM	Med-low res :: Land	
			MODIS	AM,PM	Tanre, Muller	1556*	AM	10 km :: G,R	N/A :: Sfc
Dickinson	Vegetation Temperature	3394	MODIS	AM,PM	Muller, Tanre	3670*	AM	1 km :: Land/R	N/A :: Sfc
			MODIS	AM,PM	Wan	2485	BM	<0.5-1 deg :: Land	N/A :: Sfc
Dickinson	Vegetation Type	3405	MODIS	AM,PM	Strahler, Huete et	2670	BM	5 km :: Land	N/A :: Sfc
Dickinson	Wetlands Extent	3408	MODIS	AM,PM	Strahler, Huete et	2669	AM	1 km :: Land	N/A :: Sfc
			MODIS	AM,PM	Wessman	2644	AM	30 m :: Land/L	N/A :: Sfc
Dickinson	Wind Velocity, Sea_sfc	3338	STIKSCAT	CHEM	Freilich	1679	BM	Low res :: Land	N/A :: Sfc
Dozier	Albedo, Spectral, Land_sfc	2020	STIKSCAT	CHEM	Freilich	1680	AM	1 km :: Ocean	N/A :: Near_Sfc
			MISR	AM	Diner	2021*	BM	25 km :: Ocean	
Dozier	Snow Contaminant Conc	2767	HIRIS	AM2	Dozier	2440	AM-	50 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Dozier	2768	BM	240 m :: R	N/A :: Sfc
Dozier	Snow Cover	3008	HIRIS	AM2	Dozier	3019	BM	50 m :: Snow/L	N/A :: Sfc
Dozier	Snow Cover, Wd	3028	HIRIS	AM2	Dozier	3030	BM	50 m :: Snow/L	N/A :: Sfc
Dozier	Snow Grain Size	3037	HIRIS	AM2	Dozier	3029	AM	50 m :: Snow/L	N/A :: Sfc
Dozier	Snow Liq-water Content	3039	HIRIS	AM2	Dozier	3038	BM	50 m :: Snow/L	N/A :: Sfc
Dozier	Snow Temperature, Sfc	2500	ASTER	AM1	Kahle, Becker, C	2483	BM	50 m :: Snow/L	N/A :: Sfc
Dozier	Topographic Elevation, Land_sfc	2823	MODIS	AM,PM	Wan	2484	AM	50 m :: Snow/L	N/A :: Sfc
Groze	Aerosol Conc	1006	ASTER	AM1	Kahle, JGI	2828	AM	500 m :: Snow/L	30 m :: Sfc
Groze	BrO Conc	1026	HIRIS	AM2	Dozier	2943	BM	15 m :: Land/R,L	2 km :: Sfc
			HIRIS	AM2	Dozier	2943	BM	15 x 4 dg :: G	1 km :: 7-30 km
			ASTER	AM1	Kahle, Becker, C	2483	BM	4 x 4 dg :: G	1 km :: 0-40 km
			MODIS	AM,PM	Wan	2484	AM	<2 x <1 dg :: G	3 km :: Sfc
			ASTER	AM1	Kahle, JGI	2828	AM	30 x 4 dg :: G	2.5 km :: 15-50 km
			HIRIS	AM2	Dozier	2943	BM	0.1 x 2.5 dg :: 82N-82S	
			MLIS	MO	Waters	1030	BM		

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product				Accuracy			Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel							
Grose	CFC-11(CFCU) Conc	1030	HIRDLS	CHEM	Barnett, Gille	1055	BM	15% :: 5%		1/wk		30 x 4 dg :: G		3 km :: Strat	
Grose	CFC-12(CF2Cl2) Conc	1042	HIRDLS	CHEM	Barnett, Gille	1047	BM	5-10% :: 1-10%		1/wk		30 x 4 dg :: G		1 km :: 7-30 km	
Grose	CH3Cl Conc	1065						15% :: 5%		2/day (d.n)		4 x 4 dg :: G		3 km :: Strat	
Grose	CH4 Conc	1074	MLS	MO	Waters	1070	BM	15% :: 5%		1/wk		30 x 4 dg :: G		1 km :: 7-30 km	
			HIRDLS	CHEM	Barnett, Gille	1085	BM	15% :: 5%		2/day (d.n)		30 x 4 dg :: G		3 km :: Strat	
			SAFIRE	MO	Russell	1086	AM	5-10% :: 1-10%		2/day (d.n)		4 x 4 dg :: G		3 km :: Mid-atmos	
			TES	CHEM	Beer	1089	AM	7% (15-55km)		1/(18-72 s) [?]		25 x 1-5 dg :: 86S-86N		1.5 km :: 10-65 km	
			TES	CHEM	Beer	1088	AM	40 ppb		1/(16 day)		160 x 23 km :: G		2-3 km :: 4-12 km	
			TES	CHEM	Beer	1087	AM	14 ppb		1/(16 day)		160 x 23 km :: G		2-3 km :: 13-30 km	
								15% :: 5%		1/(16 day)		16 x 5 km :: G		4-6 km :: 0-12 km	
			MLS	MO	Waters	1124	BM	<5% :: 3x10-8		2/day (d.n)		30 x 4 dg :: G		3 km :: Mid-atmos	
			MLS	MO	Waters	1125	BM	<5% :: 1x10-5		2/day (d.n)		0.1 x 2.5 dg :: 82N-82S		2.5 km :: TPSE, 60 km	
			TES	CHEM	Beer	1128	AM	15 ppb		1/(16 day)		0.1 x 2.5 dg :: 82N-82S		2.5 km :: 60-100 km	
			MOPTT	AM1	Drummond	1126	AM	10%		1/(0.4 s) [?]		160 x 23 km :: G		2-3 km :: 4-12 km	
								1% :: 0.5%		1/mo		22 km :: G		3-4 km :: 0-15 km	
			TES	CHEM	Beer	3637	BM			1/(16 day)		7M :: G		10 km :: Mid-atmos	
			MLS	MO	Waters	1107	BM	20% :: 10%		2/day		16 x 5 km :: L		3 km :: Mid-atmos	
								<5% :: 0.3-3x10-10		2/day (d.n)		30 x 4 dg :: G		2.5 km :: TPSE, 70 km	
			HIRDLS	CHEM	Barnett, Gille	1408	BM	20% :: 10%		2/day (d.n)		15 x 4 dg :: G		2 km :: Strat	
			SAGE-III	AERO-CHEM	McCormick	1437	AM	0.4 km :: 0.4 km		1/(2 min), 30/day		4 x 4 dg :: G		0.4 km :: Strat	
			GLRS-A	ALT	Spinthorne et al	1405	AM	0.2 km :: 5%		1/(2-16 day)		<2 x <1 dg :: G		1 km :: Strat/Trop	
								150 m ::				2-200 km :: Polar		75 m :: Strat	
			SAFIRE	MO	Russell	1839	BM	15% :: 5%		2/day		30 x 4 dg :: G		3 km :: Trop/meso	
			AIRS	PM	Chedin, Fleming,	1828	AM	5% (20-80 km)		1/(36-72 s) [?]		25 x 2.5-5 dg :: 86S-86N		3 km :: 10-100 km	
			MLS	MO	Waters	1838	AM	10% :: 5%		2/day (d.n)		15 x 50-50 x 50 km :: G		2 km :: Atmos	
			TES	CHEM	Beer	1842	AM	2% <50km		2/day (d.n)		0.1 x 2.5 dg :: 82N-82S		2.5 km [1.2] :: TPSE, 100 km	
			HIRDLS	CHEM	Barnett, Gille	1837	AM	50 ppm		1/(16 day)		160 x 23 km :: G		2-3 km :: 4-12 km	
								5-10% :: 1-10%		2/day (d.n)		4 x 4 dg :: G		1 km :: 7-80 km	
								25% :: 10%		2/day		30 x 10 dg :: G		3 km :: Strat	
			SAFIRE	MO	Russell	1172	BM	7% (30-35 km)		1/(36-72 s) [?]		25 x 2.5-5 dg :: 86S-86N		3 km :: 20-50 km	
			MLS	MO	Waters	1171	AM	1x10-10		1/day (z. mean)		0.1 x 2.5 dg :: 82N-82S		2.5 km :: 30-40 km	
								25% :: 10%		1/day		30 x 4 dg :: G		3 km :: Strat	
			SAFIRE	MO	Russell	1180	BM	10% (25-35 km)		1/(36-72 s) [?]		25 x 2.5-5 dg :: 86S-86N		3 km :: 15-40 km	
								15% :: 10%		1/day		30 x 4 dg :: G		3 km :: Mid-atmos	
			MLS	MO	Waters	1188	BM	<5% :: 0.1-10x10-10		2/day (d.n)		0.1 x 2.5 dg :: 82N-82S		2.5 km :: TPSE, 90 km	
			MLS	MO	Waters	1189	BM	<5% :: 0.1-10x10-10		2/day (d.n)		0.1 x 2.5 dg :: 82N-82S		2.5 km :: TPSE, 80 km	
			SAFIRE	MO	Russell	1187	AM	5% (25-55 km)		1/(36-72 s) [?]		25 x 2.5-5 dg :: 86S-86N		3 km :: 10-65 km	
								15% :: 10%		1/day		30 x 4 dg :: G		3 km :: Strat	
			SAFIRE	MO	Russell	1197	BM	15% (40-60 km)		1/(36-72 s) [?]		25 x 2.5-5 dg :: 86S-86N		3 km :: 40-60 km	
								20% :: 5%		2/day		30 x 10 dg :: G		3 km :: Mid-atmos	
			HIRDLS	CHEM	Barnett, Gille	1202	BM	5-10% :: 1-10%		2/day (d.n)		4 x 4 dg :: G		1 km :: 10-40 km	
			MLS	MO	Waters	1203	AM	<5% :: 5x10-10		2/day (d.n)		0.1 x 2.5 dg :: 82N-82S		2.5 km :: TPSE, 46 km	
			SAFIRE	MO	Russell	1204	AM	7% (15-40 km)		1/(18-72 s) [?]		25 x 1-5 dg :: 86S-86N		1.5 km :: 10-45 km	
			TES	CHEM	Beer	1205	AM	3 ppt		1/(16 day)		160 x 23 km :: G		2.3 km :: 4-12 km	

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product							Accuracy	Temporal Resolution	Horizontal	Vertical
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.		
Grose	HO2 Conc	1212	SAFIRE	MO	Russell	1217	BM	25% :: 10% :: 7% (30-60 km)	2/day	30 x 10 dg :: G	3 km :: Mid-atmos		
			MLS	MO	Waters	1216	AM	20% :: 10% :: 3-20x10-10	2/day [d,n]	25 x 2.5 dg :: 86S-86N 0.1 x 2.5 dg :: 82N-82S	3 km :: 20-75 km 2.5 km :: 30-80 km		
Grose	HOCl Conc	1218	SAFIRE	MO	Russell	1223	BM	7% (35-40 km)	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N	3 km :: 20-45 km		
			MLS	MO	Waters	1222	AM	3x10-11	1/day	0.1 x 2.5 dg :: 82N-82S	2.5 km :: 25-45 km		
Grose	Irradiance, Solar	2271	SOLSTICE	MO	Rottman	2278	BM	5% :: 1% :: <5% :: <1%	2/day	15 x 4 dg :: G	:: TOA		
Grose	N2O Conc	1229						15% :: 5%	1/day	30 x 4 dg :: G	3 km :: Mid-atmos		
			HIRDLS	CHEM	Barnett, Gille	1239	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-60 km		
			SAFIRE	MO	Russell	1241	AM	15% (20-35 km)	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	1.5 km :: 20-40 km		
			MLS	MO	Waters	1240	AM	<=5% :: 1-10x10-8	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 65 km		
Grose	N2O5 Conc	1250	TES	CHEM	Beer	1243	AM	:: 10 ppt	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km		
Grose	NO Conc	1262	HIRDLS	CHEM	Barnett, Gille	1254	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 13-45 km		
			SAFIRE	MO	Russell	1255	AM	10% (20-40 km)	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	1.5-3 km :: 10-45 km		
Grose	NO2 Conc	1269	MLS	MO	Waters	1266	BM	15% :: 5% :: 1-10x10-7	2/day	30 x 4 dg :: G	3 km :: Mid-atmos		
			TES	CHEM	Beer	1268	AM	:: 25 ppt	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km		
Grose	NO3 Conc	1279						15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos		
			HIRDLS	CHEM	Barnett, Gille	1273	BM	5-10% :: 3-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 10-55 km		
			MLS	MO	Waters	1274	AM	:: 1-8x10-8	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: 30-60 km		
			SAFIRE	MO	Russell	1275	AM	5% (20-55 km)	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	1.5 km :: 15-60 km		
			SAGE-III	AERO,CHEM	McCormick	1276	AM	10% :: 10%	1/(2 min), 30/day	<2 x <1 dg :: Polar	1 km :: 10-50 km		
			SAGE-III	AERO,CHEM	McCormick	1277	AM	10% :: 15%	1/(2 min), 30/day	<2 x <1 dg :: G	1 km :: 20-50 km		
			TES	CHEM	Beer	1278	AM	500 ppt	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km		
Grose	O(3P) Conc	1294						20% :: 10%	1/day [n]	30 x 4 dg :: G	3 km :: Mid-atmos		
			SAGE-III	AERO,CHEM	McCormick	1282	BM	10% :: 10%	1/(2 min), 30/day	<2 x <1 dg :: G	1 km :: 20-55 km		
Grose	O3 Conc	1306						30% :: 10%	1/hr	30 x 4 dg :: G	3 km :: Mid-atmos		
			SAFIRE	MO	Russell	1298	BM	15% (110-180 km)	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N	3 km :: 90-180 km		
Grose	OCO Conc	1349						2% :: 5% :: 2%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos		
			HIRDLS	CHEM	Barnett, Gille	1318	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-80 km		
			MLS	MO	Waters	1319	AM	<= 3% :: 1%(<50km)	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 110 km		
			SAFIRE	MO	Russell	1320	AM	5% (10-70 km)	1/(18-72 s) [?]	25 x 2.5 dg :: 86S-86N	1.5-3 km :: 10-100 km		
Grose	OH Conc	1355	SAGE-III	AERO,CHEM	McCormick	1321	AM	6% :: 5%	1/(2 min), 30/day	<2 x <1 dg :: Polar	1 km :: 6-85 km		
Grose	Pressure	1516						20% :: 10%	2/day	30 x 4 dg :: G	3 km :: Stratos		
			SAGE-III	AERO,CHEM	McCormick	1353	BM	20% :: 20%	1/(2 min), 30/day	<2 x <1 dg :: G	2 km :: 15-25 km		
Grose	Temperature Profile	1572	MLS	MO	Waters	1352	AM	3x10-11	1/mo, [z, mean]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 25 km		
Grose			SAFIRE	MO	Russell	1360	BM	25% :: 10%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos		
Grose								7% (30-75 km)	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N	3 km :: 20-90 km		
			SAFIRE	MO	Russell	1360	BM	0.05 :: 2%	2/day	15 x 4 dg :: G	3 km :: Mid-atmos		
			HIRDLS	CHEM	Barnett, Gille	1524	BM	0.1% :: 0.1%	2/day [d,n]	4 x 4 dg :: G	0.2 km :: 7-80 km		
Grose			MLS	MO	Waters	1525	AM	1% (30-50km)	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 70 km		
			SAFIRE	MO	Russell	1526	AM	<=2% (16-70 km)	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	1.5 km :: 10-110 km		
Grose								2 K :: 0.5 K	2/day	15 x 4 dg :: G	2 km :: Mid-atmos		
Grose			HIRDLS	CHEM	Barnett, Gille	1608	BM	K:2K>50km :: 0.3K:1K>50k	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 120 km		
			MLS	MO	Waters	1609	AM	:: 2K <100km)	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 120 km		

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product				Accuracy		Temporal Resolution	Horizontal		Vertical
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel		Resol :: Cover.	Resol :: Cover.	
Grove	Temperature Profile	1572	SAPIRE	MO	Russell	1610	AM	<0.5K(16-65 km)	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	1.5 km :: 10-110 km	2 km :: Mid-atmos
	Wind Velocity	1662	MLS	MO	Waters	1734	AM	5mts, 10dg :: 5mts, 5dg :: 10mts	2/day (d,n)	15 x 4 dg :: G	2.5 km (1.2) :: 60-110 km	
Hansen	Aerosol Optical Depth	1001	MISR	AM	Diner	2299	BM	tau=0.02 :: 0.05/10%	1/wk	500 km :: G	:: Trop	Column :: Atmos
			MISR	AM	Diner	3676	BM	0.05/10% :: 0.05/10%	1/(5-16 day) [d]	15.4 km :: G	Column :: Atmos	
			HIRDLS	CHEM	Barnett, Gille	1992	AM	0.05/10% :: 0.05/10%	9.16 day; mo; seas; yr	15.4 km :: G	Column :: Atmos	
			EOSP	AERO AM2	Travis	2297	AM	5-10% :: 1-10%	2/day (d,n)	4 x 4 dg :: G	1 km :: 7-30 km	
			MODIS	AM, PM	Kaufman, Tonne	2293	AM	0.2 :: 10%	1/day [d]	40 km :: G	Column :: Atmos	
			MODIS	AM, PM	Kaufman, Tonne	2294	AM	0.1 :: 0.05	1/day, 1/mo	0.5 dg :: Land	N/A :: Atmos	
			GLRS-A	ALT	Spinhrne et al	2291	AM	0.05 :: 0.02	1/day, 1/mo	0.5 dg :: Ocean	N/A :: Atmos	
			MISR	AM	Diner	2299	BM	tau=0.02 :: 0.05/10%	1/(2-16 day)	2-200 km :: G	N/A :: Atmos	
			MODIS	AM, PM	Kaufman, Tonne	2293	AM	0.05/10% :: 0.05/10%	1/(5-16 day) [d]	500 km :: G	:: Strat	
			GLRS-A	ALT	Spinhrne et al	2291	AM	0.1 :: 0.05	1/day, 1/mo	15.4 km :: G	Column :: Atmos	
Hansen	Albedo, Snow	2017	MODIS	AM, PM	Tonne, Kaufman	2294	AM	0.05 :: 0.02	1/day, 1/mo	0.5 dg :: Land	N/A :: Atmos	Column :: Atmos
			GLRS-A	ALT	Spinhrne et al	2291	AM	20% ::	1/(2-16 day)	2-200 km :: G	N/A :: Atmos	
			SAGE-III	AERO, CHEM	McCormick	1012	AM	5% :: 5%	1/(2 min), 30/day	<2 x <1 dg :: G	N/A :: Atmos	
			HIRDLS	CHEM	Barnett, Gille	1992	AM	5-10% :: 1-10%	2/day (d,n)	4 x 4 dg :: G	1 km :: 7-30 km	
Hansen	Albedo, Vegetation	2024	MISR	AM	Diner	2022	BM	0.02 ::	1/wk	500 km :: Land	:: S/c	Column :: Atmos
			HIRIS	AM2	Dozier	2440	AM	<0.03 :: 0.01	1/(5-16 day) [d]	1.92 km :: G	N/A :: S/c	
			AIRS	PM	Gautier ??	2000*	BM	5% :: 1%	1/wk, 1/mo	50 m :: Land/L	N/A :: S/c	
			MODIS	AM, PM	Muller, Strahler, 3665*	3665*	AM	0.02 ::	1/wk	500 km :: Land	:: S/c	
Hansen	CFC-XXX Conc	1057	MODIS	AM, PM	Muller, Strahler, 3666*	3666*	AM	5% :: 3%	1/day	50 km :: Land	N/A :: S/c	Column :: Atmos
			MODIS	AM, PM	Muller, Strahler, 3666*	3666*	AM	5% :: 3%	1/day	1 km :: Land/R	N/A :: S/c	
			HIRDLS	CHEM	Barnett, Gille	1047	BM	5-10% :: 1-10%	1/wk	1 km :: Land/R	N/A :: S/c	
			HIRDLS	CHEM	Barnett, Gille	1055	BM	5-10% :: 1-10%	2/day [d,n]	500 km :: G	:: Trop	
Hansen	CH4 Conc	1075	TES	CHEM	Beer	1089	BM	0.10% ::	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-30 km	Column :: Atmos
			TES	CHEM	Beer	1087	AM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-30 km	
			HIRDLS	CHEM	Barnett, Gille	1085	AM	0.10% ::	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km	
			AIRS	PM	Revercomb, Stroud	1136*	AM	5-10% :: 1-10%	1/(16 day)	16 x 5 km :: G	4-6 km :: 0-12 km	
Hansen	CH4 C _{inc}	1076	MOPTT	AM1	Drummond	1096	AM	10-20 :: 6-15	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-65 km	Column :: Atmos
			MOPTT	AM1	Drummond	1096	AM	10-20 :: 6-15	2/day [d,n]	50-250 km :: G	Column :: Atmos	
			TES	CHEM	Beer	1089	BM	1% ::	1/(12 s) [?]	120 km :: G	Column :: Atmos	
			TES	CHEM	Beer	1087	AM	0.10% ::	1/(16 day)	500 km :: G	:: Trop	
Hansen	CO Conc	1117	HIRDLS	CHEM	Barnett, Gille	1085	AM	5-10% :: 1-10%	1/(16 day)	16 x 5 km :: G	2-3 km :: 4-12 km	Column :: Atmos
			AIRS	PM	Revercomb, Stroud	1136*	AM	10-20 :: 6-15	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-65 km	
			MOPTT	AM1	Drummond	1096	AM	1% ::	2/day [d,n]	50-250 km :: G	Column :: Atmos	
			MOPTT	AM1	Drummond	1096	AM	1% ::	1/(12 s) [?]	120 km :: G	Column :: Atmos	
Hansen	CO Conc	1117	MOPTT	AM1	Drummond	1126	BM	0.10% ::	1/wk	500 km ::	:: Trop	Column :: Atmos
			TES	CHEM	Beer	1129	AM	10% ::	1/(0.4 s) [?]	22 km :: G	3-4 km :: 0-15 km	
			MLS	MO	Waters	1124	AM	3 ppb ::	1/(16 day)	16 x 5 km :: G	4-6 km :: 0-12 km	
			TES	CHEM	Beer	1128	AM	<5% :: 3x10-8	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: TPSE, 60 km	
Hansen	CO Conc	1117	TES	CHEM	Beer	1128	AM	15 ppb ::	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km	Column :: Atmos
			AIRS	PM	Revercomb, Stroud	1136*	AM	10-20 :: 6-15	2/day [d,n]	50-250 km :: G	Column :: Atmos	
			MOPTT	AM1	Drummond	1137	AM	1% ::	1/(4 s) [?]	66 km :: G (dy)	Column :: Atmos	
			MOPTT	AM1	Drummond	1137	AM	1% ::	1/(4 s) [?]	66 km :: G (dy)	Column :: Atmos	

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product				Accuracy		Temporal Resolution	Horizontal		Vertical
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel		Resol :: Cover.	Resol :: Cover.	
Hansen	CO2 Conc	1139	TES	CHEM	Beer	3637	BM	0.2 ppm ::	1/wk	500 km :: G	500 km :: L	Trop
Hansen	Cloud Cover	2052	CERES	TRM,AM,PM	Bartstrom	2088	BM	5% :: 2%	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	N/A :: Atmos
			MODIS	AM,PM	King	2082	BM	10% :: 5%	1/day, 1/mo	1 dg :: G	1 dg :: G	N/A :: Cloud
			AIRS	PM	Chahine, Chedin,	2062	BM	0.05 :: 0.025	2/day [d,n]	15 x 15 - 50 x 50 km :: G	15 x 15 - 50 x 50 km :: G	N/A :: Cloud
			GLRS-A	ALT	Spinliffe	2078	AM	1% ::	1/2-16 day	10-200 km :: G	10-200 km :: G	N/A ::
			MODIS	AM,PM	King	2081	AM	10% :: 5%	2/day [d,n], 1/mo	5 km :: G	5 km :: G	N/A :: Cloud
			CERES	TRM,AM,PM	Bartstrom	2087	AM	5% :: 2%	1/6 hr	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	N/A :: Atmos
			CERES	TRM,AM,PM	Bartstrom	2086	AM	5% :: 2%	6/day [d,n]	25 km :: G	25 km :: G	N/A :: Atmos
Hansen	Cloud Height	1399	CERES	TRM,AM,PM	Bartstrom	1430	BM	50 m ::	1/wk	500 km :: G	500 km :: G	Cloud
			CERES	TRM,AM,PM	Bartstrom	1395	BM	1.0 km :: 0.1 km	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	0.1 km :: Atmos
			MODIS	AM,PM	Menzel	1529	BM	50 mb :: 20 mb	1/day, 1/mo	1 dg :: G	1 dg :: G	0.1 km :: Cloud
			AIRS	PM	Chahine, Chedin,	1423*	AM	0.5 km :: 0.25 km	2/day [d,n]	15 x 15 - 50 x 50 km :: G	15 x 15 - 50 x 50 km :: G	N/A :: Cloud
			CERES	TRM,AM,PM	Bartstrom	1431	AM	0.5 km :: 0.1 km	1/6 hr	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	0.1 km :: Atmos
			MISR	AM	Diner	1432*	AM	<1000 m :: <1000 m	1/5-16 day	5 km :: G	5 km :: G	N/A :: Trop
			EOSP	AERO,AM2	Travis	1530	AM	30 mb :: 30 mb	1/day [d]	40 km :: G	40 km :: G	30 mb :: Cloud
			HIRDLS	CHEM	Barnett, Gille	1531	AM	5-10% :: 5-10%	2/day [d,n]	4 x 4 dg :: G	4 x 4 dg :: G	0.4 km :: Trop
Hansen	Cloud Temperature, Top	2461	MODIS	AM,PM	Menzel	2466	BM	5% ::	1/wk	500 km :: G	500 km :: G	Cloud
			AIRS	PM	Chahine, Chedin,	2463	AM	2 C :: 1 C	1/day, 1/mo	1 dg :: G	1 dg :: G	N/A :: Cloud
								1 K :: 0.5 K	2/day [d,n]	15 x 15 - 50 x 50 km :: G	15 x 15 - 50 x 50 km :: G	N/A :: Cloud
Hansen	Fires [Count, Extent, etc.]	2662	MODIS	AM,PM	Kaufman, Justice	2666	BM	10% ::	1/wk	500 km :: Land	500 km :: Land	Sfc
			MODIS	AM,PM	Kaufman, Justice	2664	BM		1/day, 1/wk	1 dg :: Land	1 dg :: Land	N/A :: Sfc
			MODIS	AM,PM	Kaufman, Justice	2665	AM		1/day, 1/wk	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	AM,PM	Kaufman, Justice	2663	AM		1/day, 1/wk	1 km :: Land/R	1 km :: Land/R	N/A :: Sfc
			MODIS	AM,PM	Kaufman, Justice	2471	AM	10 C :: 5 C	1/day, 1/wk	1 km :: Land/R	1 km :: Land/R	N/A :: Sfc
			MODIS	AM,PM	Kaufman, Justice	2711	AM	10 C :: 5 C	1/day, 1/wk	10 km :: Land	10 km :: Land	N/A :: Sfc
Hansen	Forest Deforestation	2658	MODIS	AM,PM	Strahler, Huete et	2672	AM	10% :: 7%	1/yr	500 km :: Land	500 km :: Land	Sfc
Hansen	H2O Conc, Stratospheric	1864	AIRS	PM	Chedin, Fleming,	1869	BM	3% ::	1/wk	500 km :: G	500 km :: G	Strat
			TES	CHEM	Beer	1843	BM	5% :: 3%	2/day [d,n]	50 km :: G	50 km :: G	N/A :: Trop
			HIRDLS	CHEM	Barnett, Gille	1837	AM	0.5 ppm	1/16 day	160 x 23 km :: G	160 x 23 km :: G	2-3 km :: 13-30 km
			MLS	MO	Waters	1838	AM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	4 x 4 dg :: G	1 km :: 7-80 km
			SAFIRE	MO	Russell	1839	AM	2% :: <50km	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 100 km
			SAGE-III	AERO,CHEM	McCormick	1841	AM	5% (20-80 km)	1/36-72 s (?)	25 x 2.5 dg :: 86S-86N	25 x 2.5 dg :: 86S-86N	3 km :: 10-100 km
								10% :: 15%	1/2 min, 30/day	<2 x <1 dg :: G	<2 x <1 dg :: G	1 km :: 3-50 km
Hansen	Humidity Profile	1812	HIRDLS	CHEM	Barnett, Gille	1837	BM	3% ::	1/wk	500 km :: G	500 km :: G	Atmos
			MLS	MO	Waters	1838	AM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	4 x 4 dg :: G	1 km :: 7-80 km
			SAFIRE	MO	Russell	1839	AM	2% :: <50km	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 100 km
			SAGE-III	AERO,CHEM	McCormick	1840	AM	5% (20-80 km)	1/36-72 s (?)	25 x 2.5 dg :: 86S-86N	25 x 2.5 dg :: 86S-86N	3 km :: 10-100 km
			SAGE-III	AERO,CHEM	McCormick	1841	AM	10% :: 10%	1/2 min, 30/day	<2 x <1 dg :: Polar	<2 x <1 dg :: Polar	1 km :: 3-50 km
			AIRS	PM	Chedin, Fleming,	1828	AM	10% :: 5%	1/2 min, 30/day	15 x 50 - 50 x 50 km :: G	15 x 50 - 50 x 50 km :: G	2 km :: Atmos
Hansen	Humidity Profile	1813	AIRS	PM	Chedin, Fleming,	1828	BM	3% ::	1/wk	500 km :: G	500 km :: G	Trop
								10% :: 5%	2/day [d,n]	15 x 50 - 50 x 50 km :: G	15 x 50 - 50 x 50 km :: G	2 km :: Atmos

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product				Accuracy			Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel							
Hansen	Humidity Profile	1813	TES	CHEM	Beer	1842	AM	50 ppm		1/(16 day)		160 x 23 km :: G		2-3 km :: 4-12 km	
			TES	CHEM	Beer	1844	AM	50 ppm		1/(16 day)		16 x 5 km :: G		4-6 km :: 0-12 km	
Hansen	Industrial_Emissions Conc	1372	HIRDLS	CHEM	Barnett, Gille	1085	AM	5-10% :: 1-10%		2/day [d.n]		500 km :: G		1 km :: 7-65 km	
			SAGE-III	AERO,CHEM	McCormick	1277	AM	10% :: 15%		1/(2 min), 30/day		<2 x <1 dg :: G		1 km :: 20-50 km	
			TES	CHEM	Beer	1256	AM	300 ppt		1/(16 day)		160 x 23 km :: G		2-3 km :: 4-12 km	
			ACRIM	MO	Willson	2274	BM	0.05% :: 0.1%		1/wk		500 km :: G		2-3 km :: 4-12 km	
Hansen	Land_gfc Temperature	2477						0.0005%		1/wk		N/A :: N/A		N/A :: TOA	
			AIRS	PM	Chedin, Fleming,	2481	BM	0.2 C ::		1/wk		500 km :: Land		500 km :: Sfc	
			MODIS	AM,PM	Wan	2485	AM	1.0 K :: 0.5 K		2/day [d.n]		50 km :: Land		N/A :: Sfc	
Hansen	N2O Conc	1230						1-3 C :: 1 C		1/day, 1/wk		10 km :: Land		N/A :: Sfc	
			HIRDLS	CHEM	Barnett, Gille	1239	BM	5-10% :: 1-10%		1/wk		500 km :: G		1 km :: 7-60 km	
			AIRS	PM	Revercomb, Stro	1249*	AM	20-40 :: 15-30		2/day [d.n]		4 x 4 dg :: G		Column :: Atmos	
Hansen	O3 Conc	1307						3% ::		2/day [d.n]		500 km :: G		1 km :: 7-80 km	
			HIRDLS	CHEM	Barnett, Gille	1318	BM	5-10% :: 1-10%		2/day [d.n]		4 x 4 dg :: G		1 km :: 7-80 km	
			MLS	MO	Walters	1319	AM	<= 3% :: 1% (<50km)		2/day [d.n]		0.1 x 2.5 dg :: 82N-82S		2.5 km [1.2] :: TPSE, 110 km	
			SAGE-III	AERO,CHEM	McCormick	1321	AM	6% :: 5%		1/(2 min), 30/day		<2 x <1 dg :: Polar		1 km :: 6-85 km	
			MLS	MO	Walters	1328	AM	10% ::		2/day [d.n]		0.1 x 2.5 dg :: 82N-82S		2.5 km [1.2] :: TPSE, 70 km	
			TES	CHEM	Beer	1323	AM	20 ppb		1/(16 day)		160 x 23 km :: G		2-3 km :: 13-30 km	
			TES	CHEM	Beer	1324	AM	3 ppb		1/(16 day)		160 x 23 km :: G		2-3 km :: 4-12 km	
			TES	CHEM	Beer	1325	AM	13 ppb		1/(16 day)		16 x 5 km :: G		4-6 km :: 0-12 km	
Hansen	Pigment Conc	3077						2% ::		1/wk		500 km :: Ocean		1 km :: 7-80 km	
			MODIS	AM,PM	Gordon, Clark	2591	BM	30% :: 10%		1/day, 1/wk, 1/mo		20 km :: Ocean/G,R		N/A :: TOO	
			MODIS	AM,PM	Hoge, Esaias	2594*	BM	50% :: 15%		1/day, 1/wk		20 km :: Ocean/R		N/A :: TOO	
Hansen	Precipitation Amount	1930						10% ::		1/wk		500 km :: G		500 km :: Sfc	
			AIRS	PM	Susskind	1969*	BM	2mm/day :: 1mm/day		2/day [d.n]		50 km :: G		N/A :: Trop	
			MIMR	PM	TBD	3601	BM	1 mo		1 mo		1 dg :: Global		N/A :: Sfc	
Hansen	Radiation Budget	2337	AIRS	PM	Saelin	3694*	AM	2mm/hr :: 1mm/hr		2/day [d.n]		50 km :: G		N/A :: Trop	
										1/wk		500 km :: G		1 km :: 7-80 km	
			CERES	TRM,AM,PM	Barkstrom	2144	BM	10% :: 5%		1/day [Avg], 1/mo [Avg]		1.25 x 1.25 dg :: G		1 yr :: Atmos	
Hansen	Sea_Ice Cover	3150	CERES	TRM,AM,PM	Barkstrom	2147	BM	25% :: 10%		1/day [Avg], 1/mo [Avg]		1.25 x 1.25 dg :: G		1 yr :: Atmos	
								3% ::		1/wk		500 km :: Ocean/Cryo		500 km :: Sfc	
			MIMR	PM	TBD	3611	BM	0.1 :: 0.1		2/day [d.n]		22 km :: Ocean/Cryo		N/A :: Sfc	
Hansen	Sea_gfc Temperature (SST)	2512	AIRS	PM	Chedin, Saelin	3151*	BM	0.2 C ::		2/day [d.n]		50 km :: Ocean/Cryo		N/A :: Sfc	
								0.2 C ::		1/wk		500 km :: Ocean		500 km :: Sfc	
			MODIS	AM,PM	Brown, Barton	2532	BM	0.3-0.4K :: 0.1-0.6K		1/day, 1/wk, 1/mo		50 km :: Ocean		N/A :: Sfc	
			MODIS	AM,PM	Brown	2528	BM	0.3-0.6K :: 0.1-0.3K		1/day, 1/wk, 1/mo		20 km :: Ocean/G,R		N/A :: Sfc	
			MODIS	AM,PM	Brown, Barton	2531	BM	0.3-0.6K :: 0.1-0.3K		1/day, 1/wk, 1/mo		20 km :: Ocean/G,R		N/A :: Sfc	
			MODIS	AM,PM	Brown	2527	AM	0.3-0.5 K :: 0.1-0.3 K		1/day, 1/wk, 1/mo		1 km :: Ocean/L		N/A :: Sfc	
			MODIS	AM,PM	Brown	2529	AM	0.3-0.6K :: 0.1-0.3K		1/day, 1/wk, 1/mo		4 km :: Ocean/R,L		N/A :: Sfc	
			MODIS	AM,PM	Brown, Barton	2530	AM	0.3-0.6K :: 0.1-0.3K		1/day, 1/wk, 1/mo		4 km :: Ocean/R,L		N/A :: Sfc	
			AIRS	PM	Chedin, Fleming,	2523*	AM	0.5 - 1 K :: 0.4 - 0.5 K		2/day [d.n]		50 km :: Ocean		N/A :: Sfc	
			MODIS	AM,PM	Abbott	2603*	AM	50-100%		1/day, 1/wk		4 km :: Ocean-I/G,R		N/A :: TOO	
Hansen	Snow Cover	3009						0.02 ::		1/wk		500 km :: Land		500 km :: Sfc	
			AIRS	PM	Saelin	3018*	BM	<=5% :: <=5%		2/day [d.n]		50 km :: Land		N/A :: Sfc	
			MODIS	AM,PM	Salomonson	3020	BM	<=5% :: <=5%		1/day, 1/wk		10 km :: Land		N/A :: Sfc	

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product					Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Cover.	Vertical Resol :: Cover.
Hansen	Snow Cover	3009	MODIS	PM	TBD	3607	AM			22 km :: Land	N/A :: Sfc
			HIRIS	AM2	Dozier	3019	AM	5% :: 2%	1/wk, 1/mo	50 m :: Cryo/L	N/A :: Sfc
			MODIS	AM,PM	Salomonson	3021	AM	<5% :: <=5%	1/day, 1/wk	1 km :: Land/R	N/A :: Sfc
Hansen	Soil Moisture	2962						10% ::	1/wk	500 km :: Land	:: Sfc
			MODIS	PM	TBD	3605	BM			60 km :: Land	N/A :: Sfc
Hansen	Temperature Profile	1573	MODIS	PM	TBD	3606	BM		1 mo	1 dg :: Land	N/A :: Sfc
										500 km :: G	:: Strat
Hansen	Temperature Profile	1574	HIRDLS	CHEM	Barnett, Gille	1608	BM	0.3 C ::	1/wk	500 km :: G	1 km :: 7-80 km
			AIRS	PM	Chedin, Fleming,	1588	AM	K:2K>50km :: 0.3K;1K>50K	2/day [d,n]	15 x 50 - 50 x 50 km :: G	1, 2 km :: Atmos
			GGI	ALT	Melbourne	1605	AM	1.0 K :: 0.4 K	2/day [d,n]	1-200 km :: G	1 km :: 5 - 50 km
			MLS	MO	Waters	1609	AM	1 K :: 1 K	700 re/day	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 120 km
			SAFIRE	MO	Russell	1610	AM	:: 2K <100km	2/day [d,n]	25 x 1-5 dg :: 86S-86N	1.5 km :: 10-110 km
			SAGE-III	AERO,CHEM	McCormick	1611	AM	:: <0.5K (16-65 km)	1/(18-72 s) [?]	<2 x <1 dg :: G	1 km :: 6-55 km
			SAGE-III	AERO,CHEM	McCormick	1612	AM	2 K :: 2 K	1/(2 min), 30/day	<2 x <1 dg :: Polar	1 km :: 6-70 km
								2 K :: 2 K	1/(2 min), 30/day	500 km :: G	:: Trop
			AIRS	PM	Chedin, Fleming,	1588	BM	0.3 C ::	1/wk	15 x 50 - 50 x 50 km :: G	1, 2 km :: Atmos
								0.2 C ::	1/wk	500 km :: Land	:: Sfc
Hansen	Temperature, Near_sfc	1629	AIRS	PM	Chedin, Fleming,	1588	BM	1.0 K :: 0.4 K	2/day [d,n]	15 x 50 - 50 x 50 km :: G	1, 2 km :: Atmos
			AIRS	PM	Chedin, Fleming,	2481	AM	1.0 K :: 0.5 K	2/day [d,n]	50 km :: Land	N/A :: Sfc
Hansen	Temperature, Near_sfc	1630						0.2 C ::	1/wk	500 km :: Ocean	:: Sfc
			AIRS	PM	Chedin, Fleming,	1588	BM	1.0 K :: 0.4 K	2/day [d,n]	15 x 50 - 50 x 50 km :: G	1, 2 km :: Atmos
Hansen	Vegetation Extent	2718	AIRS	PM	Chedin, Fleming,	2523*	AM	0.5 - 1 K :: 0.4 - 0.5 K	2/day [d,n]	50 km :: Ocean	N/A :: Sfc
								5% ::	1/wk	500 km :: Land	:: Sfc
Hansen	Vegetation Extent	2718	MODIS	AM,PM	Justice, Huete et al	2749	BM	0.01 :: 0.01	1/day, 1/wk, 1/mo	10 km :: Land	N/A :: Sfc
			MODIS	AM,PM	Strahler, Huete et al	2670	BM	10% :: 5%	1/mo, 1/secs	5 km :: Land	N/A :: Sfc
Hansen	Vegetation Index	2742						5% ::	1/wk	500 km :: Land	:: Sfc
			MODIS	AM,PM	Justice, Huete et al	2749	BM	0.01 :: 0.01	1/day, 1/wk, 1/mo	10 km :: Land	N/A :: Sfc
Hansen	Vegetation Type	2731	MISR	AM	Diner	2756	AM	2% :: 2%	1/(5-16 day) [d]	1.92 km :: Land	N/A :: Sfc
								5% ::	1/wk	500 km :: Land	:: Sfc
Hansen	Wetlands Extent	2764	MODIS	AM,PM	Strahler, Huete et al	2670	BM	10% :: 5%	1/mo, 1/secs	5 km :: Land	N/A :: Sfc
			HIRIS	AM2	Weisman	2644	AM	10% :: 10%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc
			MODIS	AM,PM	Justice, Huete et al	2749	AM	0.01 :: 0.01	1/day, 1/wk, 1/mo	10 km :: Land	N/A :: Sfc
								5% ::	1/wk	500 km :: Land	:: Sfc
Hansen	Wind Velocity, Sea_sfc	1663	MODIS	AM,PM	Strahler, Huete et al	2670	BM	10% :: 5%	1/mo, 1/secs	5 km :: Land	N/A :: Sfc
			MODIS	AM,PM	Strahler, Huete et al	2669	AM	10% :: 5%	1/mo, 1/secs	1 km :: Land	N/A :: Sfc
								10% ::	1/wk	500 km :: Ocean	:: Sfc
			STIKSCAT	CHEM	Freilich	1679	BM	10% :: 7%, 16 deg	1/(2 day)	1 dg :: Ocean	N/A :: Near Sfc
Harris	Aerosol Angstrom Exponent	3442	AIRS	PM	Aurnann	1718*	AM-		1/day	50 km :: Ocean	N/A :: Sfc
			MODIS	PM	TBD	3594	AM-			39 km :: Ocean	N/A :: Sfc
								15% :: 5%	1/day	1-20 km :: Ocean/R	N/A :: Sfc
Harris	Aerosol Mass Loading	3424	MODIS	AM,PM	Gordon	2295	BM	15% :: 5%	1/day, 1/wk, 1/mo	1 km :: Ocean/R,L	N/A :: Atmos
			MODIS	AM,PM	Gordon	2296	BM	15% :: 5%	1/day, 1/wk, 1/mo	20 km :: Ocean	N/A :: Atmos
Harris	Aerosol Mass Loading	3424						1% :: 1%	1/day	50 km :: Ocean/R	N/A :: Atmos
			MODIS	AM,PM	Kaufman, Tanre	1017	BM	30% :: 10%	1/day, 1/mo	0.5 dg :: G,R	N/A :: Atmos

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match		
Harris	Aerosol Optical Depth	3444	MODIS	AM,PM	Tenne, Kaufman	2294	BM	20-50 km :: Ocean/R	N/A :: Atmos
			MISR	AM	Diner	2299	AM	0.5 dg :: Ocean 15.4 km :: G	Column :: Atmos
Harris	Aerosol Radiance, Single_scattering	3446	MODIS	AM,PM	Gordon	2344	BM	1-20 km :: Ocean/R	N/A :: Atmos
			MODIS	AM,PM	Gordon	2345	BM	1 km :: Ocean/G,R,L 20 km :: Ocean/G,R,L	N/A :: Atmos
Harris	Aerosol Size-distribution (Radius Dispersion)	3423	MODIS	AM,PM	Tenne, Kaufman	1022	BM	50 km :: Ocean/R	N/A :: Atmos
Harris	Chlorophyll Fluorescence	3462	MODIS	AM,PM	Abbot	2576	BM	1-20 km :: Ocean/R	N/A :: TOO
			MODIS	AM,PM	Abbot	2575	BM	1 km :: Ocean/R,L 4 km :: Ocean/G,R	N/A :: TOO
Harris	Chlorophyll_a Conc	3454	MODIS	AM,PM	Hoge	2573	BM	1 km :: Ocean/R	N/A :: TOO
			MODIS	AM,PM	Abbot	2566*	BM	0.25-1 km :: Ocean/R	N/A :: TOO
Harris	Chlorophyll_a Conc	3455	MODIS	AM,PM	Carder	2570	BM	1 km :: Ocean/R,L 1 km :: Ocean-IL/G,R	N/A :: TOO
			MODIS	AM,PM	Carder, Melack	2565	AM	60-90 m :: Ocean-IL/L	N/A :: TOO
Harris	Chlorophyll_a Conc	3456	MODIS	AM,PM	Carder	2570	BM	1-20 km :: Ocean/R	N/A :: TOO
			MODIS	AM,PM	Clark	2571	BM	1 km :: Ocean-IL/L	N/A :: TOO
Harris	Cloud Cover	3436	MODIS	AM,PM	Clark	2572	BM	20 km :: Ocean-IL/G,R	N/A :: TOO
			MODIS	AM,PM	Abbot	2566*	AM	1 km :: Ocean/R,L	N/A :: TOO
Harris	Cloud Height, Top	3437	MODIS	AM,PM	Abbot	2567*	AM	4 km :: Ocean/G,R	N/A :: TOO
			MODIS	AM,PM	Carder	2570	BM	0.25-1 km :: Ocean/R	N/A :: TOO
Harris	Cloud Optical Depth	3445	MODIS	AM,PM	Carder, Davis	2564	AM	1 km :: Ocean-IL/G,R 30-90 m :: Ocean-IL/L	N/A :: TOO
			MODIS	AM,PM	King	2081	BM	5-50 km :: Ocean/R	N/A :: Cloud
Harris	Cloud Temperature, Top	3449	MODIS	AM,PM	Berkstrom	2086	BM	5 km :: G	N/A :: Atmos
			MODIS	AM,PM	Chahine, Chedin	2062	AM	25 km :: G	N/A :: Atmos
Harris	Gelboff Absorption Coef	3453	MODIS	AM,PM	Spirhite	2078	AM	15 x 15 - 50 x 50 km :: G	N/A :: Cloud
			MODIS	AM,PM	King	2311	BM	10-200 km :: G	N/A ::
Harris	Humidity Profile	3438	MODIS	AM,PM	Berkstrom	2086	BM	20-50 km :: Ocean/R	0.1 km :: Atmos
			MODIS	AM,PM	Menzel	1528	BM	25 km :: G	N/A :: Cloud
Harris			MODIS	AM,PM	Chahine, Chedin	1423*	AM	15 x 15 - 50 x 50 km :: G	N/A :: Cloud
			MODIS	AM,PM	King	2311	BM	5-50 km :: Ocean/R	N/A :: Cloud
Harris			MODIS	AM,PM	Travis	2313	AM	5 km :: G	N/A :: Cloud
			MODIS	AM,PM	Berkstrom	2316	AM	40 km :: G	Column :: Cloud
Harris			MODIS	AM,PM	Berkstrom	2321	AM	25 km :: G	N/A :: Atmos
			MODIS	AM,PM	Berkstrom	2321	AM	25 km :: G	N/A :: Atmos
Harris			MODIS	AM,PM	Menzel	2467	BM	5-50 km :: Ocean/R	N/A :: Atmos
			MODIS	AM,PM	Chahine, Chedin	2463	BM	15 x 15 - 50 x 50 km :: G	N/A :: Cloud
Harris			MODIS	AM,PM	Carder, Melack	3215	BM	0.25-1 km :: Ocean/R	N/A :: Cloud
			MODIS	AM,PM	Carder, Melack	3215	BM	30-90 m :: Ocean-IL/L	N/A :: TOO
Harris			MODIS	AM,PM	Carder, Melack	3215	BM	10-50 km :: Ocean/R	1 km :: Atmos
			MODIS	AM,PM	Carder, Melack	3215	BM	15 x 50 - 50 x 50 km :: G	2 km :: Atmos

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product					Accuracy	Temporal	Horizontal		Vertical
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	
Harris	Land_gfc Temperature, Skin	3450	AIRS	PM	Chedin, Fleming,	2481	BM	0.5 :: 0.2	2/day	20-50 km :: Ocean/R	20-50 km :: Ocean/R	N/A :: Sfc
			MODIS	AM,PM	Wan	2485	BM	1-3 C :: 1 C	1/day, 1/wk	10 km :: Land	10 km :: Land	N/A :: Sfc
			MODIS	AM,PM	Wan	2484	BM	1 C :: 1 C	1/day, 1/wk	1 km :: Land/R	1 km :: Land/R	N/A :: Sfc
Harris	Level-1B Backscatter Coef, HIRIS	3448						20% :: 10%	2-10 days	0.25-1 km :: Ocean/R		N/A :: Sfc
Harris	Level-2 Radiance, Water-leaving	3447	HIRIS	AM2	Carder, Melack	3210	BM-	50% :: 25%	1/(2 day) [d]	30-90 m :: Ocean/L	30-90 m :: Ocean/L	N/A :: Sfc
			MODIS	AM,PM	Gordon et al	2416	BM	5% :: 5%	1/day, 1/wk, 1/mo	1-20 km :: Ocean/R	1 km :: Ocean/R, L	N/A :: Sfc
			MODIS	AM,PM	Gordon et al	2417	BM	5% :: 5%	1/day, 1/wk, 1/mo	20 km :: Ocean/G,R	20 km :: Ocean/G,R	N/A :: Sfc
Harris	Ocean Productivity, Primary	3460	MODIS	AM,PM	Abbott	2602*	BM	30% :: 5%	1/day	1-20 km :: Ocean/R	1-20 km :: Ocean/R	N/A :: TOO
			MODIS	AM,PM	Abbott	2603*	BM	50-100%	1/day, 1/wk	1 km :: Ocean-I/R, L	1 km :: Ocean-I/R, L	N/A :: TOO
			MODIS	AM,PM	Esaias	2606	BM	<35% :: <20%	1/wk, 1/mo, 1/yr	4 km :: Ocean-I/G,R	4 km :: Ocean-I/G,R	N/A :: TOO
Harris	Ocean Water Attenuation Coef@490nm	3461	HIRIS	AM2	Davis, Melack et	2601	AM	100% :: 50%	1/(>=2 day)	30-90 m :: Ocean/L	30-90 m :: Ocean/L	N/A :: TOO
			MODIS	AM,PM	Gordon, Clark	3200	BM	25% :: 10%	1/day	1-20 km :: Ocean/R	1-20 km :: Ocean/R	N/A :: TOO
			MODIS	AM,PM	Gordon, Clark	3199	BM	25% :: 10%	1/day, 1/wk, 1/mo	1 km :: Ocean-I/R, L	1 km :: Ocean-I/R, L	N/A :: TOO
Harris	Ocean Wave Height	3431						10-20% :: 5-20%	1-10 days	7-25 km :: Ocean/R		N/A :: TOO
Harris	Organic Matter Conc, Dissolved	3457	ALT	ALT	Fu	3129	BM	>5m, 10% ::		7 km :: Ocean	7 km :: Ocean	N/A :: Sfc
			MODIS	AM,PM	Carder	2581*	BM	100% :: 30%	1/day	1-20 km :: Ocean/R	1-20 km :: Ocean/R	N/A :: Sfc
			MODIS	AM,PM	Carder	2580*	BM	150% :: 30%	1/day, 1/wk, 1/mo	1 km :: Ocean/R, L	1 km :: Ocean/R, L	N/A :: TOO
Harris	Pigment Conc	3458	MODIS	AM,PM	Parlow et al	2583	BM	150% :: 30%	1/day, 1/wk, 1/mo	1 km :: Ocean [Southern]R, L	1 km :: Ocean [Southern]R, L	N/A :: TOO
			MODIS	AM,PM	Parlow et al	2582	BM	150% :: 30%	1/day, 1/wk, 1/mo	20 km :: Ocean [Southern]	20 km :: Ocean [Southern]	N/A :: TOO
			MODIS	AM,PM	Gordon, Clark	2592	BM	30% :: 10%	1/day	1-20 km :: Ocean/R	1-20 km :: Ocean/R	N/A :: TOO
Harris	Pigment Conc, Accessory	3459	MODIS	AM,PM	Gordon, Clark	2591	BM	30% :: 10%	1/day, 1/wk, 1/mo	1 km :: Ocean/R, L	1 km :: Ocean/R, L	N/A :: TOO
			MODIS	AM,PM	Hoge, Esaias	2594*	BM	50% :: 15%	1/day, 1/wk	20 km :: Ocean/G,R	20 km :: Ocean/G,R	N/A :: TOO
			MODIS	AM,PM	Hoge, Esaias	2593*	BM	50% :: 15%	1/day, 1/wk	1 km :: Ocean/R	1 km :: Ocean/R	N/A :: TOO
Harris	Precipitable Water	3439	MODIS	AM,PM	Hoge	3320*	BM	50% :: 15%	1 day, wk, mo	1 km :: Ocean/RL	1 km :: Ocean/RL	N/A :: TOO
			MODIS	AM,PM	Hoge	3319*	BM	50% :: 15%	1 day, wk, mo	20 km :: Ocean/G,R	20 km :: Ocean/G,R	N/A :: TOO
			HIRIS	AM2	Davis, Melack	3072	BM	20% :: 10%	2-10 days	0.25-1 km :: Ocean/R	0.25-1 km :: Ocean/R	N/A :: TOO
Harris	Precipitable Water	3439	MODIS	AM,PM	Hoge	3320*	BM	100% :: 50%	1/(>=2 day)	60-90 m :: Ocean-I/L	60-90 m :: Ocean-I/L	N/A :: TOO
			MODIS	AM,PM	Hoge	3320*	BM	50% :: 15%	1 day, wk, mo	1 km :: Ocean/RL	1 km :: Ocean/RL	N/A :: TOO
			MODIS	AM,PM	Menzel	1875	BM	10 mm :: 5 mm	1/day	10-25 km :: Ocean/R	10-25 km :: Ocean/R	N/A :: Atmos
Harris	Precipitable Water	3440	MIMR	PM	TBD	3596	BM	5% :: 3%	2/day	22 km :: Ocean	22 km :: Ocean	Column :: Trop
			AIRS	PM	Chedin, Fleming,	1869	BM	5% :: 3%	2/day [d,n]	20-50 km :: Ocean/R	20-50 km :: Ocean/R	N/A :: Trop
			AIRS	PM	Rosenkranz	3693	BM	2 mm :: 1 mm	2/day [d,n]	50 km :: G	50 km :: G	N/A :: Trop
Harris	Precipitation Amount	3441	MODIS	AM,PM	Menzel	1875	BM	10 mm :: 5 mm	2/day	5 km :: G	5 km :: G	N/A :: Atmos
			AIRS	PM	Sustind	1969*	BM	2 :: 1	2/day	20-50 km :: Ocean/R	20-50 km :: Ocean/R	N/A :: Trop
			AIRS	PM	Sustind	1969*	BM	2mm/day :: 1mm/day	2/day [d,n]	50 km :: G	50 km :: G	N/A :: Trop
Harris	Radiative Flux, Sea_gfc	3443	MIMR	PM	TBD	3600	AM	2mm/hr :: 1mm/hr	2/day [d,n]	22 km :: Global	22 km :: Global	N/A :: Sfc
			AIRS	PM	Gautier	2177*	BM	5% :: 2%	2/day	20-50 km :: Ocean/R	20-50 km :: Ocean/R	N/A :: Sfc
			AIRS	PM	Gautier	2177*	BM	<10 :: TBD	1/day	50 km :: Ocean	50 km :: Ocean	N/A :: Sfc

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product					Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Horizontal Resol :: Cover.	
Harris	Radiative Flux, Sea_gfc	3443	AIRS	PM	Gautier	2233*	BM	50 km :: Ocean	
			MODIS	AM,PM	Gordon	2267	AM-	10% :: 5%	1 km :: Ocean
			MODIS	AM,PM	Tarre	2268*	AM-	200 :: 5 - 20%	1 km :: G,R
Harris	Sea_Level Height, Along-track	3427						7-25 km :: Ocean/R	
Harris	Sea_gfc.Temperature (SST)	3451	ALT	ALT	Fu	3112	BM	7 km :: Ocean	
Harris	Sea_gfc.Temperature (SST)	3452	MODIS	AM,PM	Brown	2527	BM	0.25-1 km :: Ocean/R	
Harris	Sea_gfc.Temperature (SST)	3452	MODIS	AM,PM	Brown	2528	BM	1 km :: Ocean/L	
Harris	Sea_gfc.Topographic Height	3429	MODIS	AM,PM	Brown, Barton	2531	BM	20 km :: Ocean/R	
Harris	Temperature	3428	ALT	ALT	Fu	3108	BM	20 km :: Ocean/L	
Harris	Wind Speed, Sea_gfc	3435	AIRS	PM	Chedin, Fleming	1588	BM	10-50 km :: Ocean/R	
Harris	Wind Velocity	3433	ALT	ALT	Fu	1735	BM	15 x 50 - 50 x 50 km :: G	
Harris	Wind Velocity	3434	MIMR	PM	TBD	3594	AM	1-25 km :: Ocean/R	
Harris	Wind Velocity	3434	AIRS	PM	Aumann	1718*	AM	7 km :: Ocean	
Harris	Wind Velocity	3433	STIKSCAT	CHEM	Freilich	1680	BM	39 km :: Ocean	
Harris	Wind Velocity	3434	STIKSCAT	CHEM	Freilich	1679	BM	50 km :: Ocean	
Hartmann	Aerosol Optical Depth	1002	SAGE-III	AERO,CHEM	McCormick	1012	BM	25 km :: Ocean	
Hartmann	Aerosol Optical Depth	1002	MISR	AM	Diner	2299	BM	100 km :: Ocean/R	
Hartmann	Aerosol Optical Depth	1002	EOSP	AERO,AM2	Travis	2297	AM	1 dg :: Ocean	
Hartmann	Aerosol Optical Depth	1002	MODIS	AM,PM	Kaufman, Tarré	2293	AM	20 km :: G	
Hartmann	Aerosol Optical Depth	1002	MODIS	AM,PM	Tarré, Kaufman	2294	AM	<2 x <1 dg :: G	
Hartmann	Aerosol Optical Depth	1002	MISR	AM	Diner	3676	AM	15.4 km :: G	
Hartmann	Aerosol Optical Depth	1002	MODIS	AM,PM	Tarré, Kaufman	1022	BM	Column :: Atmos	
Hartmann	Aerosol Optical Depth	1002	MISR	AM	Diner	1993	BM	Column :: Atmos	
Hartmann	Aerosol Optical Depth	1002	MISR	AM	Diner	3678	BM	Column :: Atmos	
Hartmann	Aerosol Optical Depth	1002	MISR	AM	Diner	1994*	AM	Column :: Atmos	
Hartmann	Aerosol Optical Depth	1002	MODIS	AM,PM	Tarré, Muller	2016*	BM	Column :: Atmos	
Hartmann	Aerosol Optical Depth	1002	AIRS	PM	Gautier ??	2000*	AM	Column :: Atmos	
Hartmann	Aerosol Optical Depth	1002	MODIS	AM,PM	Tarré, Muller	2015*	AM	Column :: Atmos	
Hartmann	Aerosol Optical Depth	1002	ASTER	AM1	Welch	3627	BM	Column :: Atmos	
Hartmann	Aerosol Optical Depth	1002	HIRIS	AM2	Welch	1776	AM	Column :: Atmos	
Hartmann	Aerosol Optical Depth	1002	AIRS	PM	Saelin	1893*	BM	Column :: Atmos	
Hartmann	Aerosol Optical Depth	1002	MODIS	AM,PM	King, Menzel	1764	AM-	Column :: Atmos	
Hartmann	Aerosol Optical Depth	1002	CERES	TRM,AM,PM	Barkstrom	1769	AM-	Column :: Atmos	
Hartmann	Aerosol Optical Depth	1002	MIMR	PM	TBD	3598	BM	Column :: Atmos	

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy		Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel					
Hartmann	Cloud Liq water Total Column	1919	CERES	TRM,AM,PM	Barkstrom	1895	AM	75% :: 10%	1/6 hr	1.25 x 1.25 dg :: G		1 yr :: Atmos	
Hartmann	Cloud Optical Depth	2306	MODIS	AM,PM	King	2311	BM	25% :: 0.25	1/day	10 km :: Ocean		N/A :: Cloud	
			CERES	TRM,AM,PM	Barkstrom	2318	AM	20% :: 10%	1/day [d]	5 km :: G		N/A :: Cloud	
			GLRS-A	ALT	Spinliffe	2300	AM	25% :: 5%	1/6 hr	1.25 dg :: G		N/A :: Atmos	
								20% ::	1/(2-16 day)	1-100 km :: G			
Hartmann	Humidity Profile	1814	AIRS	PM	Chedin, Fleming,	1828	BM	10% :: 10%	1/day	10 km :: G		1 km :: 0-15 km	
								10% :: 5%	2/day [d,n]	15 x 50 - 50 x 50 km :: G		2 km :: Atmos	
Hartmann	Precipitation Amount	1931	AIRS	PM	Susskind	1969*	BM	10 :: 10	1/day	10 km :: Ocean		N/A :: Trop	
			AIRS	PM	Saelin	3694*	AM	2mm/day :: 1mm/day	2/day [d,n]	50 km :: G		N/A :: Trop	
			MIMR	PM	TBD	3600	AM	2mm/hr :: 1mm/hr	2/day [d,n]	50 km :: G		N/A :: Trop	
								5% :: 2%	1/day	22 km :: Global		N/A :: Sfc	
Hartmann	Radiative Flux, LW	2188	AIRS	PM	Gautier	2177*	BM	<10 :: TBD	1/day	<30 km :: Ocean		N/A :: Sfc	
			CERES	TRM,AM,PM	Barkstrom	2182	AM	5 W/m ² :: 2 W/m ²	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G		N/A :: Sfc	
			CERES	TRM,AM,PM	Barkstrom	2203	AM	5 W/m ² :: <5 W/m ²	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G		N/A :: Sfc	
Hartmann	Radiative Flux, LW	2190	CERES	TRM,AM,PM	Barkstrom	2205	BM	5% :: 2%	1/day	<30 km :: Ocean		N/A :: TOA	
								5 W/m ² :: 2 W/m ²	6/day [d,n]	25 km :: G		N/A :: TOA	
Hartmann	Radiative Flux, SW	2213	CERES	TRM,AM,PM	Barkstrom	2251	BM	0.5% :: 0.5%	1/day	20 km :: G		N/A :: TOA	
								7 W/m ² :: 2 W/m ²	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G		N/A :: TOA	
Hartmann	Radiative Flux, SW	2214	AIRS	PM	Gautier	2232*	BM	0.5% :: 0.5%	1/day	20 km :: G		N/A :: Sfc	
			AIRS	PM	Gautier	2233*	BM	<15 :: <5	1/day	50 km :: Land		N/A :: Sfc	
			CERES	TRM,AM,PM	Barkstrom	2230	AM	<10 :: <5	1/day	50 km :: Ocean		N/A :: Sfc	
			CERES	TRM,AM,PM	Barkstrom	2231	AM	10 W/m ² :: 2 W/m ²	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G		N/A :: Sfc	
			CERES	TRM,AM,PM	Barkstrom	2229	AM	15 W/m ² :: 2 W/m ²	1/6 hr	1.25 x 1.25 dg :: G		N/A :: Sfc	
								15 W/m ² :: 2 W/m ²	3/day [d]	1.25 x 1.25 dg :: G		N/A :: Sfc	
Hartmann	Sea_sfc Temperature (SST)	2513	MODIS	AM,PM	Brown	2529	BM	0.5 K :: 0.5 K	1/day	10 km :: Ocean		N/A :: Sfc	
			MODIS	AM,PM	Brown	2530	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	4 km :: Ocean/R,L		N/A :: Sfc	
			MODIS	AM,PM	Brown, Barton	2527	AM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	4 km :: Ocean/R,L		N/A :: Sfc	
			MODIS	AM,PM	Brown	2528	AM	0.3-0.5 K :: 0.1-0.3 K	1/day, 1/wk, 1/mo	1 km :: Ocean/L		N/A :: Sfc	
			MODIS	AM,PM	Brown		AM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G,R		N/A :: Sfc	
Hartmann	Temperature Profile	1575	AIRS	PM	Chedin, Fleming,	1588	BM	1 :: 1	1/day	10 km :: Ocean		1 km :: 0-15 km	
			TES	CHEM	Beer	1614	AM	1.0 K :: 0.4 K	2/day [d,n]	15 x 50 - 50 x 50 km :: G		1, 2 km :: Atmos	
								:: 2 K	1/(16 day)	16 x 5 km :: G		1 km, 4-6 km :: 0-12 km	
Hartmann	Wind Velocity, Sea_sfc	1664	STIKSCAT	CHEM	Freilich	1680	BM	2 m/s :: 2 m/s	1/day	50 km :: Ocean		N/A :: Sfc	
			STIKSCAT	CHEM	Freilich	1679	AM	:: 10%; 16 deg	1/(2 day)	25 km :: Ocean		N/A :: Near Sfc	
								:: 7%; 16 deg	1/(2 day)	1 dg :: Ocean		N/A :: Near Sfc	
Isaacs	Aerosol Layer Boundary Height	1015	GLRS-A	ALT	Spinliffe et al	1014	BM	75 m ::	1/event, 1/mo	2 km :: Land/R		75 m :: Atmos	
								150 m ::	1/(2-16 day)	2-200 km :: G		75 m :: Atmos	
Isaacs	Aerosol Mass Loading	1016	MODIS	AM,PM	Kaufman, Turre	1017	BM	30% :: 10%	1/wk	1-10 km :: Land/R		N/A :: Atmos	
								30% :: 10%	1/day, 1/mo	0.5 dg :: G,R		N/A :: Atmos	
Isaacs	Aerosol Size-distribution	1024	MISR	AM	Diner	1994*	BM	:: 20%	1/wk	2-15 km ::		Column :: Atmos	
			MISR	AM	Diner	1993	AM	15% :: 10%	1/(5-16 day)	1.9 km :: R		Column :: Atmos	
			MISR	AM	Diner	3678	AM	15% :: 10%	1/(5-16 day) [d]	15.4 km :: G		Column :: Atmos	
			MODIS	AM,PM	Turre, Kaufman	1022	AM	15% :: 10%	9,16 day; mo; seas; yr	15.4 km ? :: G		Column :: Atmos	
								10-30% :: 10%	1/day, 1/mo	0.5 dg :: G,R		N/A :: Atmos	
Isaacs	Albedo, Land_sfc	1998	MISR	AM	Diner	2021*	BM	:: 3%	1/wk	250 m :: Land/R		N/A :: Sfc	
								<=0.03 :: 0.01	1/(5-16 day) [d]	240 m :: R		N/A :: Sfc	

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match		
Isachs	Albedo, Land_sfc	1998	MODIS	AM,PM	Tamr, Muller	2015*	AM	1 km :: G,R	N/A :: Sfc
			MODIS	AM,PM	Muller, Strahler, J	3665*	AM	1 km :: Land/R	N/A :: Sfc
			MODIS	AM,PM	Muller, Strahler, J	3666*	AM	1 km :: Land/R	N/A :: Sfc
Isachs	Cloud Cover	2053	MODIS	AM,PM	King	2081	BM	5 km :: Land/R	N/A :: Cloud
			CERES	TRM,AM,PM	Barkstrom	2086	AM	5 km :: G	N/A :: Cloud
			HIRIS	AM2	Kieffer, Clark	2884	AM	30 m :: L	N/A :: Sfc
Isachs	Drainage_Network Structure	2902	ASTER	AM1	Kahle, JGI	2828	AM	15 m :: Land/R,L	30 m :: Sfc
			HIRIS	AM2	Douler	2922	BM	10-30 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Kieffer	2895	AM	30 m :: Glacier/L	N/A :: Sfc
Isachs	Humidity Profile	1815	AIRS	PM	Chedin, Fleming,	1828	BM	50 km :: Land/R	2 km :: Trop
			TES	CHEM	Beer	1844	AM	15 x 50 - 50 x 50 km :: G	2 km :: Atmos
			GLRS-A	ALT	Bentley	2912	BM	16 x 5 km :: G	4-6 km :: 0-12 km
Isachs	Ice_Sheet Elevation	2908	ALT	ALT	Zwally	2911	AM	10 m :: Land/Cryo	N/A :: Sfc
			ASTER	AM1	TBD	3633	BM	75 m :: Land/Cryo	N/A :: Sfc
			ASTER	AM1	Kahle, Becker, Q	2483	BM	15-30 m :: Land/L	N/A :: Sfc
Isachs	Land_sfc Emissivity, Spectral	2125	ASTER	AM1	Kahle, Becker, S	2129	BM	TBD :: Land/TBD	TBD :: TBD
			MODIS	AM,PM	Wan	3323*	AM	15-90 m :: Land/L	N/A :: Sfc
			ASTER	AM1	Kahle, JGI	2828	BM	90 m :: Land/R,L	N/A :: Sfc
Isachs	Land_sfc Roughness	1553	ASTER	AM1	Kahle, JGI	2828	BM	30 m :: Land/L	N/A :: Sfc
			MODIS	AM,PM	Wan	2484	BM	15 m :: Land/R,L	30 m :: Sfc
			ASTER	AM1	Kahle, Becker, Q	2483	BM	1 km :: Land/R	N/A :: Sfc
Isachs	Land_sfc Temperature, Skin	2496	ASTER	AM1	Kahle, Becker, Q	2483	BM	1 km :: Land/R	N/A :: Sfc
			GLRS-A	ALT	Schutz et al	2858	BM	90 m :: Land	N/A :: Sfc
			ASTER	AM1	Gillespie, Rowan,	2883*	BM	90 m :: Land	N/A :: Sfc
Isachs	Land_sfc Temperature, Skin	2497	HIRIS	AM2	Kieffer, Clark	2884	BM	0.1-10 km :: Land	100-500 nm :: Sfc
			ASTER	AM1	Kahle, JGI	2828	AM	90 m :: Land/R,L	N/A :: Sfc
			ASTER	AM1	Kahle, JGI	2828	AM	30 m :: L	N/A :: Sfc
Isachs	Landform Feature Distribution	2851	ASTER	AM1	Kahle, JGI	2828	AM	15 m :: Land/R,L	30 m :: Sfc
			ASTER	AM1	Kahle, JGI	2828	AM	[2-D sect.] :: Land/L	N/A :: Sfc
			ASTER	AM1	Kahle, JGI	2828	AM	15 m :: Land/R,L	30 m :: Sfc
Isachs	Landform Scarp-fault Elevation	2869	ASTER	AM1	Kahle, JGI	2828	AM	15 m :: Land/R,L	30 m :: Sfc
			ASTER	AM1	Kahle, JGI	2828	AM	[2-D sect.] :: Land/L	N/A :: Sfc
			ASTER	AM1	Kahle, JGI	2828	AM	15 m :: Land/R,L	30 m :: Sfc
Isachs	Mineral Conc, Rock Soil	2778	ASTER	AM1	Rowan, Kahle, Gill	2773	BM	15-30 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Rowan, Clark	2766	AM	15,30,90 m :: Land/R,L	N/A :: Sfc
			HIRIS	AM2	Rowan, Clark	2772	AM	30 m :: Land/L	N/A :: Sfc
Isachs	Optical Depth, Total	2326	HIRIS	AM2	Rowan, Clark	2776	AM	30 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Rowan, Clark	2784	AM	30 m :: Land/L	N/A :: Sfc
			ASTER	AM1	Gillespie, Rowan,	2817*	AM	90 m :: Land/R,L	N/A :: Sfc
Isachs	Optical Depth, Total	2326	ASTER	AM1	Pieri, Kahle	3298	AM	15,30,90 m :: Land/R,L	N/A :: Sfc
			ASTER	AM1	Gillespie	2801	AM	15 m :: Land/R,L	N/A :: Sfc
			EOSP	AERO,AM2	Travis	2313	BM	10-50 km :: Land/R	Column :: Atmos

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product					Accuracy		Temporal	Horizontal		Vertical
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	Vertical	
Isachs	Optical Depth, Total	2326	MODIS	AM,PM	King	2311	BM	20% :: 10%	1/day [d]	5 km :: G	N/A :: Cloud		
			EOSP	AERO,AM2	Travis	2297	BM	0.2 :: 10%	1/day [d]	40 km :: G	Column :: Atmos		
			MISR	AM	Diner	2298*	BM	0.05/10% :: 0.05/10%	1/(5-16 day) [d]	1.92 km :: R	Column :: Atmos		
			GLRS-A	ALT	Spinhome et al	2291	AM	20% ::	1/(2-16 day)	2-200 km :: G	N/A :: Atmos		
			MODIS	AM,PM	Kaufman, Tarré	2293	AM	0.1 :: 0.05	1/day, 1/mo	0.5 dg :: Land	N/A :: Atmos		
Isachs	Precipitation Amount	1932							1/wk	5-50 km :: Land/R	N/A :: S/c		
			AIRS	PM	Susskind	1969*	BM	2mm/day :: 1mm/day	2/day [d,n]	50 km :: G	N/A :: Trop		
Isachs	Precipitation Rate	1933	AIRS	PM	Staelin	3694*	AM	2mm/hr :: 1mm/hr	2/day [d,n]	50 km :: G	N/A :: Trop		
			MIMR	PM	TBD	3600	BM		1/event, 1/mo	5-50 km :: Land/R	N/A :: S/c		
Isachs	River Channel Patterns	2982	MIMR	PM	TBD	3601	AM-		1 mo	1 dg :: Global	N/A :: S/c		
			HIRIS	AM2	Kieffer, Clark	2884	AM	:: 30%		15-30 m :: Land/L	N/A :: S/c		
Isachs	Snow Cover	3010						5% :: 2%	1/mo	1 km :: Land/R	N/A :: S/c		
			MODIS	AM,PM	Salomonson	3021	BM	<=5% :: <=5%	1/day, 1/wk	1 km :: Land/R	N/A :: S/c		
Isachs	Snow Cover	3011	ASTER	AM1	TBD	3634	BM	5% :: 2%	1/season	15-30 m :: Land/L	N/A :: S/c		
			HIRIS	AM2	Dozier	3019	BM	5% :: 2%	TBD	TBD :: Land/TBD	TBD :: TBD		
Isachs	Temperature Profile	1576						1 :: 0.4	1/wk	50 km :: Land/R	1 km :: Trop		
			AIRS	PM	Chedin, Fleming,	1588	BM	1.0 K :: 0.4 K	2/day [d,n]	15 x 50 x 50 km :: G	1, 2 km :: Atmos		
Isachs	Topographic Elevation, Land_sfc, (DEM)	2833	TES	CHEM	Beer	1614	AM	:: 2 K	1/(16 day)	16 x 5 km :: G	1 km, 4-6 km :: 0-12 km		
			ASTER	AM1	Kahle, JGI	2828	BM	30 :: 10	1/mission	20 m :: Land/L	N/A :: S/c		
Isachs	Topographic Elevation, Land_sfc, (DEM)	2838						>50 m :: >30 m	1/mission	15 m :: Land/R,L	30 m :: S/c		
			MISR	AM	Diner	2846*	BM	:: 120	1/mission	720 m :: Land/R	N/A :: S/c		
Isachs	Topographic Elevation, Land_sfc, (DEM)	2839	ASTER	AM1	Kahle, JGI	2828	AM	100 m :: 100 m	1/mission	500 m :: Land	N/A :: S/c		
			ASTER	AM1	Kahle, JGI	2828	BM	>50 m :: >30 m	1/mission	15 m :: Land/R,L	30 m :: S/c		
Isachs	Topographic Elevation, Land_sfc, (DEM)	2837						100 m :: 50 m	1/mission	50 m :: Land/R	N/A :: S/c		
			ASTER	AM1	Kahle, JGI	2828	BM	>50 m :: >30 m	1/mission	15 m :: Land/R,L	30 m :: S/c		
Isachs	Topographic Elevation, Land_sfc, Control, (2837						1 m :: 1 m	1/mission	point :: Land/L	N/A :: S/c		
			ASTER	AM1	Kahle, JGI	2828	BM	>50 m :: >30 m	1/mission	15 m :: Land/R,L	30 m :: S/c		
Isachs	Vegetation Biomass, Green	2617						40% :: 15%	1/mo	30 m :: Land/L	N/A :: S/c		
			HIRIS	AM2	Ustin, Wessman	2620	BM	30% :: 15%	1/(2-16 day)	30 m :: Land/L	N/A :: S/c		
Isachs	Vegetation Extent	2719							1/season	1 km :: Land/R	N/A :: S/c		
			MODIS	AM,PM	Strahler, Huete et	2669	BM	10% :: 5%	1/mo, 1/season	1 km :: Land	N/A :: S/c		
			MODIS	AM,PM	Justice, Huete et al	2751	AM	0.01 :: 0.01	1/day, 1/wk, 1/mo	1 km :: Land/R	N/A :: S/c		
			MODIS	AM,PM	Justice, Huete et al	2750	AM	0.01 :: 0.01	1/day, 1/wk, 1/mo	0.5 km :: Land/R	N/A :: S/c		
Isachs	Vegetation Index	2743						1 :: 1	1/mo	240-500 m :: Land/R	N/A :: S/c		
			MISR	AM	Diner	2757*	BM	2% :: 2%	1/(5-16 day) [d]	240 m :: Land/R	N/A :: S/c		
			MODIS	AM,PM	Justice, Huete et al	2750	AM	0.01 :: 0.01	1/day, 1/wk, 1/mo	0.5 km :: Land/R	N/A :: S/c		
			HIRIS	AM2	Ustin et al	2746	AM	20% :: 10%	1/(2-16 day)	30 m :: Land/L	N/A :: S/c		
			ASTER	AM1	Gillespie	2747*	AM		15 m :: Land/R,L	N/A :: S/c			
Isachs	Vegetation Index	2744						1 :: 0.5	1/mo	30-60 m :: Land/L	N/A :: S/c		
			ASTER	AM1	Gillespie	2747*	BM		15 m :: Land/R,L	N/A :: S/c			
			HIRIS	AM2	Ustin et al	2746	AM	20% :: 10%	1/(2-16 day)	30 m :: Land/L	N/A :: S/c		
			MODIS	AM,PM	Strahler, Huete et	2669	BM	10% :: 5%	1/mo, 1/season	1 km :: Land	N/A :: S/c		
Isachs	Vegetation Type	2732											

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match		
Kerr, Sorooshian Aerosol Conc		1007	SAGE-III	AERO,CHEM	McCormick	1012	AM-	23 km :: Land	3 km :: Atmos
			HIRDLS	CHEM	Barnett, Gille	1992	AM-	<2 x <1 dg :: G	1 km :: 0-40 km
Kerr, Sorooshian Albedo, Cloud		2006	HIRIS	AM2	Welch	2008	AM	500 m :: Land/R	Cloud
			MISR	AM	Diner	2038*	AM	90 m :: R	Cloud
Kerr, Sorooshian Albedo, Land_gfc		2014	MISR	AM	Diner	2021*	BM	240 m :: R	N/A :: Trop
			MODIS	AM,PM	Tanre, Muller	2015*	AM	500 m :: Land	N/A :: Sfc
Kerr, Sorooshian Albedo, Planetary Spectral, TOA		2009	MODIS	AM,PM	Muller, Strahler,	3665*	AM	1 km :: G,R	N/A :: Sfc
			MODIS	AM,PM	Muller, Strahler,	3666*	AM	1 km :: Land/R	N/A :: Sfc
Kerr, Sorooshian Albedo, Planetary Spectral, TOA		2009	MISR	AM	Diner	2011	BM	1 km :: Land/R	N/A :: Sfc
			MODIS	AM,PM	Muller, Strahler	2001	AM	25 km :: Land/R	TOA
Kerr, Sorooshian CO2 Conc		1140	TES	CHEM	Beer	3637	BM	1.92 km :: G	N/A :: TOA
			MODIS	AM,PM	King	2081	BM	1 km :: Land/R	N/A :: TOA
Kerr, Sorooshian Cloud Cover		2075	GLRS-A	ALT	Spinthorne	2078	AM	50 km :: G	N/A :: Cloud
			ASTER	AM1	Welch	2080	AM	10-200 km :: G	N/A ::
Kerr, Sorooshian Cloud Height, Base		1385	HIRIS	AM2	Welch	2079	AM	90 m :: L	N/A :: Cloud
			GLRS-A	ALT	Spinthorne et al	1389	BM	30 m :: L	Cloud
Kerr, Sorooshian Cloud Height, Top		1417	CERES	TRM,AM,PM	Barkstrom	1393	BM	1 km :: Land	100 mb :: Trop
			HIRIS	AM2	Welch	1390	AM	2-100 km :: G	75 m :: Cloud
Kerr, Sorooshian Cloud Height, Top		1417	ASTER	AM1	Welch	1391	AM	25 km :: G	0.1 km :: Atmos
			MODIS	AM,PM	Menzel	1528	BM	30 m :: L	N/A :: Cloud
Kerr, Sorooshian Cloud Liq_water Content		1905	MISR	AM	Diner	1433*	BM	100 m :: L	N/A :: Cloud
			GLRS-A	ALT	Spinthorne et al	1425	AM	5 km :: G	N/A :: Trop
Kerr, Sorooshian Cloud Temperature, Top		2462	MISR	AM	Diner	1432*	AM	200 m :: G	75 m :: Cloud
			HIRIS	AM2	Welch, Goetz	1426	AM	5 km :: G	N/A :: Trop
Kerr, Sorooshian Cloud Temperature, Top		2462	ASTER	AM1	Welch	3626	BM	30 m :: Land/R	Cloud
			HIRIS	AM2	Welch	2281	AM	90 m :: L	N/A :: Cloud
Kerr, Sorooshian Humidity Profile		1816	ASTER	AM1	Welch	2465	BM	90 m :: R	Cloud
			MODIS	AM,PM	Menzel	2467	BM	500 m :: Land/R	Cloud
Kerr, Sorooshian Land Thermal Inertia		2541	AIRS	PM	Chedin, Fleming,	1828	BM	5 km :: G	N/A :: Cloud
			ASTER	AM1	Kieffer et al	2542	BM	15 x 50 - 50 x 50 km :: G	1 km :: Atmos
Kerr, Sorooshian Land_gfc Emissivity		2123	ASTER	AM1	Kieffer et al	2124	BM	60 m :: Land/R	2 km :: Atmos
			HIRIS	AM2	Slater	2432	BM	90 m :: Land/R,L	N/A :: Sfc
Kerr, Sorooshian Land_gfc Reflectance, Directional		2428	ASTER	AM1	Slater	2433	BM	90 m :: Land/R	N/A :: Sfc
			HIRIS	AM2	Slater	2432	BM	90 m :: L	N/A :: Sfc
Kerr, Sorooshian Land_gfc Reflectance, Directional		2428	ASTER	AM1	Slater	2433	BM	30 m :: Land/R	N/A :: Sfc
			HIRIS	AM2	Slater	2432	BM	30 m :: Land/R,L	N/A :: Sfc

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy		Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Land/L	Resol :: R	Resol :: S/c	Resol :: S/c
Kerr, Sorooshian	Land_sfc Reflectance, Directional	2428	HIRS	AM2	Gerdul	2035	AM	5% :: 5%	1/(16 day)	30 m :: Cover	240 m :: R	N/A :: S/c	N/A :: S/c
			MISR	AM	Diner	2632	AM	5% :: 2%	1/(5-16 day) [d]			N/A :: S/c	N/A :: S/c
Kerr, Sorooshian	Land_sfc Roughness, Aerodynamic	1549	MODIS	AM,PM	Tanre, Muller	1557*	BM	0.1 m :: 0.2 m	1/week	25 km :: Land		N/A :: S/c	N/A :: S/c
			MODIS	AM,PM	Muller, Tanre	3670*	BM	15% :: 5 - 8%	1/day, 1/week	10 km :: G,R		N/A :: S/c	N/A :: S/c
Kerr, Sorooshian	Land_sfc Roughness, Geometric	1552	MODIS	AM,PM	Muller, Tanre	1556*	BM	5% :: 3%	1/day	1 km :: Land/R		N/A :: S/c	N/A :: S/c
			MODIS	AM,PM	Tanre, Muller	1557*	BM	0.1 cm :: 0.2 cm	2/mo	25 km :: Land		N/A :: S/c	N/A :: S/c
Kerr, Sorooshian	Lightning Rate	1758	MODIS	AM,PM	Muller, Tanre	3670*	BM	15% :: 5 - 8%	1/day, 1/week	10 km :: G,R		N/A :: S/c	N/A :: S/c
			MODIS	AM,PM	Tanre, Muller	1556*	BM	5% :: 3%	1/day	1 km :: Land/R		N/A :: S/c	N/A :: S/c
Kerr, Sorooshian	O3 Total Burden	1308	LIS	TRM	Christian	1756	BM	1 :: 1	1/(10 min)	1 km :: Land		N/A :: Trop	N/A :: Trop
			MODIS	AM,PM	Menzel	1333	BM	5% :: 5%	1/day	25 km :: G		Column :: Atmos	Column :: Atmos
Kerr, Sorooshian	Optical Depth, Total	2325	AIRS	PM	Chedin, Revercom	1332*	AM	15-20DU :: 10DU	2/day, 1/day	5 km :: G		Column :: Atmos	Column :: Atmos
			MODIS	AM,PM	Menzel	1334	AM	5 - 15% :: 3 - 10%	2/day [d,n]	50 km :: G		Column :: Atmos	Column :: Atmos
Kerr, Sorooshian	Precipitable Water	1865	MODIS	AM,PM	King	2311	BM	10% :: 10%	1/(5-16 day)	0.3 dg :: G		Column :: Atmos	Column :: Atmos
			MISR	AM	Diner	2298*	BM	20% :: 10%	1/day [d]	5 km :: G		N/A :: Cloud	N/A :: Cloud
Kerr, Sorooshian	Precipitation Amount, Daily	1934	EOSP	AERO,AM2	Travis	2313	AM	0.05/10% :: 0.05/10%	1/(5-16 day) [d]	1.92 km :: R		Column :: Atmos	Column :: Atmos
			MODIS	AM,PM	Kaufman, Tanre	2293	AM	20% :: 10%	1/day [d]	40 km :: G		Column :: Cloud	Column :: Cloud
Kerr, Sorooshian	Precipitation Rate, Rain	1959	MODIS	AM,PM	Kaufman, Tanre	2293	AM	0.1 :: 0.05	1/day, 1/mo	0.5 dg :: Land		N/A :: Atmos	N/A :: Atmos
			AIRS	PM	Chedin, Fleming	1869	BM	10% :: 10%	2/day	50 km :: Land		Column :: Atmos	Column :: Atmos
Kerr, Sorooshian	Pressure	1518	MODIS	AM,PM	Menzel	1875	BM	5% :: 3%	2/day [d,n]	50 km :: G		N/A :: Trop	N/A :: Trop
			MODIS	AM,PM	Kaufman, Tanre	1874	AM	10 mm :: 5 mm	2/day	5 km :: G		N/A :: Atmos	N/A :: Atmos
Kerr, Sorooshian	Radiative Flux, Broadband, Down	2142	MODIS	AM,PM	Kaufman, Tanre	3321	AM	8% :: 6%	1/day	5 km :: Land		N/A :: Atmos	N/A :: Atmos
			MODIS	AM,PM	Kaufman, Tanre	3321	AM	12% :: 8%	1 day, mo	1 km :: Land		N/A :: Atmos	N/A :: Atmos
Kerr, Sorooshian	Radiative Flux, LW, Down	2163	AIRS	PM	Susskind	1969*	BM	1 mm :: 1 mm	1/day	1 km :: Land/R		N/A :: S/c	N/A :: S/c
			AIRS	PM	Saelin	3694*	AM	2mm/day :: 1mm/day	2/day [d,n]	50 km :: G		N/A :: Trop	N/A :: Trop
Kerr, Sorooshian	Radiative Flux, SW, Down	2216	MIMR	PM	TBD	3600	BM	2mm/hr :: 1mm/hr	2/day [d,n]	50 km :: G		N/A :: Trop	N/A :: Trop
			HIRDLS	CHEM	Barnett, Gille	1524	BM	20% :: 20%	1/day	500 m :: G		N/A :: Trop	N/A :: Trop
Kerr, Sorooshian	Radiative Flux, SW, Up	2240	CERES	TRM,AM,PM	Barkstrom	2223	BM	5% :: 5%	1/hr	22 km :: Global		3 km :: S/c	3 km :: S/c
			CERES	TRM,AM,PM	Barkstrom	2223	BM	0.1% :: 0.1%	2/day [d,n]	25 km :: Land		0.2 km :: 7-80 km	0.2 km :: 7-80 km
Kerr, Sorooshian	Radiative Flux, SW, Up	2240	CERES	TRM,AM,PM	Barkstrom	2223	BM	1 W/m ² :: 1 W/m ²	1/hr	8 km :: Land/R		N/A :: TOA	N/A :: TOA
			CERES	TRM,AM,PM	Barkstrom	2223	BM	15 W/m ² :: 2 W/m ²	1/(6 hr)	1.25 x 1.25 dg :: G		N/A :: S/c	N/A :: S/c
Kerr, Sorooshian	Radiative Flux, SW, Up	2240	CERES	TRM,AM,PM	Barkstrom	2223	BM	15 W/m ² :: 2 W/m ²	3/day [d]	1.25 dg :: G		N/A :: S/c	N/A :: S/c
			CERES	TRM,AM,PM	Barkstrom	2223	BM	10 W/m ² :: 2 W/m ²	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G		N/A :: S/c	N/A :: S/c
Kerr, Sorooshian	Radiative Flux, SW, Up	2240	CERES	TRM,AM,PM	Barkstrom	2223	BM	10 W/m ² :: 2 W/m ²	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G		N/A :: S/c	N/A :: S/c
			CERES	TRM,AM,PM	Barkstrom	2223	BM	10% :: 10%	[diurnal]	500 m :: Land/R		N/A :: S/c	N/A :: S/c
Kerr, Sorooshian	Radiative Flux, SW, Up	2240	CERES	TRM,AM,PM	Barkstrom	2223	BM	15 W/m ² :: 2 W/m ²	1/(6 hr)	1.25 x 1.25 dg :: G		N/A :: S/c	N/A :: S/c
			CERES	TRM,AM,PM	Barkstrom	2223	BM	15 W/m ² :: 2 W/m ²	6/day [d,n]	1.25 x 1.25 dg :: G		N/A :: S/c	N/A :: S/c
Kerr, Sorooshian	Radiative Flux, SW, Up	2240	CERES	TRM,AM,PM	Barkstrom	2223	BM	10 W/m ² :: 2 W/m ²	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G		N/A :: S/c	N/A :: S/c
			CERES	TRM,AM,PM	Barkstrom	2223	BM	15% :: 15%	[diurnal]	500 m :: Land/R		N/A :: S/c	N/A :: S/c
Kerr, Sorooshian	Radiative Flux, SW, Up	2240	CERES	TRM,AM,PM	Barkstrom	2247	AM	15 W/m ² :: 2 W/m ²	3/day [d]	1.25 dg :: G		N/A :: S/c	N/A :: S/c
			CERES	TRM,AM,PM	Barkstrom	2250	AM	15 W/m ² :: 2 W/m ²	1/(6 hr)	1.25 x 1.25 dg :: G		N/A :: S/c	N/A :: S/c

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product			Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	
Kerr, Sorooshian Soil Class		2792	ASTER	AMI	Kahle, Gillespie	2803*	BM	
			ASTER	AMI	Gillespie	2801	BM	
			ASTER	AMI	Gillespie, Rowan	2883*	AM-	
Kerr, Sorooshian Soil Mineral Type		2802	ASTER	AMI	Kahle, Gillespie	2803*	BM	
			ASTER	AMI	Gillespie, Rowan	2817*	AM	
			HIRIS	AM2	Rowan, Clark	2772	AM	
Kerr, Sorooshian Soil Reflectance, Bi-directional, (BRDF)		2042	HIRIS	AM2	Rowan, Clark	2784	AM	
			HIRIS	AM2	Geral	2035	BM	
			MISR	AM	Diner	2632	BM	
Kerr, Sorooshian Structure-Location, Significant Mappable		2882	MODIS	AM,PM	Muller, Strahler, 1	3669*	AM	
			MODIS	AM,PM	Terre, Muller	2424*	AM	
			MODIS	AM,PM	Terre, Muller	2425*	AM	
Kerr, Sorooshian Temperature Profile		1577	HIRIS	AM2	Kietler, Clark	2884	BM	
			ASTER	AMI	Gillespie, Rowan	2883*	BM	
			AIRS	PM	Chedin, Fleming	1588	BM	
Kerr, Sorooshian Temperature, Near_sfc		1631	HIRDLS	CHEM	Barnett, Gille	1608	AM	
			AIRS	PM	Chedin, Fleming	1588	BM	
			MODIS	AM,PM	Wan	2484	AM	
Kerr, Sorooshian Topographic Elevation, Land_sfc		2826	MODIS	AM,PM	Brown	2527	AM	
			MISR	AM	Diner	2846*	BM	
			ASTER	AMI	Kahle, JGI	2828	AM	
Kerr, Sorooshian Topographic Elevation, Land_sfc, (DEM)		2834	ASTER	AMI	Kahle, JGI	2828	BM	
			ASTER	AMI	Kahle, JGI	2828	BM	
			ASTER	AMI	Rowan	2856	BM	
Kerr, Sorooshian Topographic Slope (Azimuth), Land_sfc		2845	ASTER	AMI	Kahle, JGI	2828	BM	
			ASTER	AMI	Rowan	2856	BM	
			MODIS	AM,PM	Strahler, Huete et	2669	BM	
Kerr, Sorooshian Vegetation Biome Area		2630	MODIS	AM,PM	Strahler, Huete et	2670	BM	
			MODIS	AM,PM	Westman	2644	AM	
			HIRIS	AM2	Ustin, Westman	2741	AM	
Kerr, Sorooshian Vegetation Density		2634	HIRIS	AM2	Ustin, Westman	2741	BM	
			HIRIS	AM2	Ustin	2657	AM	
			HIRIS	AM2	Ustin	2656	BM	
Kerr, Sorooshian Vegetation Height		2636	HIRIS	AM2	Ustin	2656	BM	
			HIRIS	AM2	Ustin	2656	BM	
			HIRIS	AM2	Ustin	2656	BM	

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product			Accuracy		Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match			
Kerr, Sorooshian	Vegetation Reflectance, Bi-directional, (BRE	2046	HIRIS	AM2	Gerd	2035	BM	10% :: 10%	N/A :: Land	N/A :: Sfc
			MISR	AM	Diner	2632	BM	5% :: 5%	30 m :: Land/L	N/A :: Sfc
			MODIS	AM,PM	Muller, Strahler,	3669*	AM	5% :: 2%	240 m :: R	N/A :: Sfc
			MODIS	AM,PM	Tanre, Muller	2424*	AM	15% :: 3%	1 km :: Land/R	N/A :: Sfc
			MODIS	AM,PM	Tanre, Muller	2425*	AM	15% :: 5 - 8%	1 km :: G.R	N/A :: Sfc
Kerr, Sorooshian	Vegetation Spatial Density	2638	HIRIS	AM2	Ustin	2657	BM	20% :: 10%	10 km :: G.R	N/A :: Sfc
Kerr, Sorooshian	Vegetation Temperature	2456	HIRIS	AM2	Ustin	2657	BM	40% :: 20%	60 m :: Land/R	N/A :: Sfc
			MODIS	AM,PM	Wan	2484	BM	0.5 K :: 0.5 K	30 m :: Land/L	N/A :: Sfc
			ASTER	AM1	Kahle, Becker, Qi	2483	AM	1 C :: 1 C	500 m :: Land/R	N/A :: Sfc
			AIRS	PM	Chedin, Fleming,	2481	AM	1-6 K :: 0.3 K	1 km :: Land	N/A :: Sfc
								1.0 K :: 0.5 K	90 m :: Land	N/A :: Sfc
Kerr, Sorooshian	Vegetation Type	2733	HIRIS	AM2	Westman	2644	BM	10% :: 10%	30 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Ustin et al	2746	AM	20% :: 10%	30 m :: Land/L	N/A :: Sfc
								10% :: 10%	100 m :: Land/R	N/A :: Sfc
			HIRIS	AM2	Dozier	2440	BM	5% :: 1%	50 m :: Land/L	N/A :: Sfc
								5% :: 5%	50 km :: R	N/A :: Atmos
Lau	Albedo, Snow	2018	CERES	TRM,AM,PM	Barkstrom	2086	BM	5% :: 2%	25 km :: G	N/A :: Atmos
			AIRS	PM	Chahine, Chedin,	2062	BM	0.05 :: 0.025	15 x 15 - 50 x 50 km :: G	N/A :: Cloud
			MODIS	AM,PM	King	2081	AM	10% :: 5%	5 km :: G	N/A :: Cloud
			GLRS-A	ALT	Spinthine	2078	AM	1% ::	10-200 km :: G	N/A ::
								5% :: 5%	100 km :: G	N/A ::
Lau	Cloud Cover, Cirrus	2070	GLRS-A	ALT	Spinthine	1410	AM	0.2 ::	1-10 km :: G	75 m ::
			GLRS-A	ALT	Spinthine	1400	AM	75 m ::	2-10 km :: G	75 m ::
			MODIS	AM,PM	King	2082	AM	10% :: 5%	1 dg :: G	N/A :: Cloud
			CERES	TRM,AM,PM	Barkstrom	2088	AM	5% :: 2%	1.25 x 1.25 dg :: G	N/A :: Atmos
			AIRS	PM	Chahine, Chedin,	2062	AM	0.05 :: 0.025	15 x 15 - 50 x 50 km :: G	N/A :: Cloud
Lau	Cloud Height, Cirrus	1402	GLRS-A	ALT	Spinthine	2078	AM	1% ::	10-200 km :: G	N/A ::
								100 m ::	50 km :: G	N/A :: Atmos
			AIRS	PM	Chahine, Chedin,	1423*	BM	0.5 km :: 0.25 km	15 x 15 - 50 x 50 km :: G	N/A :: Cloud
			GLRS-A	ALT	Spinthine	1410	AM	0.2 ::	1-10 km :: G	75 m ::
			GLRS-A	ALT	Spinthine	1400	AM	75 m ::	2-10 km :: G	75 m ::
Lau	Cloud Liq. water Total Column	1920	CERES	TRM,AM,PM	Barkstrom	1899	BM	0.05 :: 0.05	100 km :: G	N/A :: Trop
			CERES	TRM,AM,PM	Barkstrom	1901	AM	50% :: 10%	1.25 x 1.25 dg :: G	Column :: Atmos
			AIRS	PM	Rosenkranz	1908*	AM	0.1 :: 0.1	1.25 x 1.25 dg :: G	Column :: Atmos
								100m ² :: 100m ²	50 km :: G	N/A :: Cloud
			HIRIS	AM2	Kieffer, Clark	2884	AM	30% ::	10 m :: Land/L	N/A :: Sfc
Lau	Drainage Basin Boundary	2904	ASTER	AM1	Kahle, JGI	2828	AM	>50 m :: >30 m	30 m :: L	N/A :: Sfc
								10% :: 10%	15 m :: Land/R.L	30 m :: Sfc
			ASTER	AM1	Kahle, JGI	2828	BM	>50 m :: >30 m	30 m :: Land/L	N/A :: Sfc
								10% :: 10%	15 m :: Land/R.L	30 m :: Sfc
			MODIS	AM,PM	Tanre, Muller	1557*	BM	15% :: 5 - 8%	10 km :: Land/R	N/A :: Sfc
Lau	Land_sfc Roughness, Aerodynamic	1550	MODIS	AM,PM	Muller, Tanre	3670*	BM	5% :: 3%	1 km :: Land/R	N/A :: Sfc
								15% :: 5 - 8%	1 km :: G.R	N/A :: Sfc
			MODIS	AM,PM	Tanre, Muller	1556*	BM	1% ::	1 km :: G.R	N/A :: Sfc
								1% ::	1 km :: G.R	N/A :: Sfc
			MODIS	AM,PM	Tanre, Muller	1556*	BM	1% ::	1 km :: G.R	N/A :: Sfc

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #			
Lau	Precipitation Amount	1935	AIRS	PM	Suskind	1969*	2mm/day :: 1mm/day	500 km :: G	N/A :: Trop
			AIRS	PM	Saelin	3694*	2mm/hr :: 1mm/hr	50 km :: G	N/A :: Trop
Lau	Precipitation Amount	1936	AIRS	PM	Suskind	1969*	2mm/day :: 1mm/day	50 km :: R	N/A :: Sfc
			AIRS	PM	Saelin	3694*	2mm/hr :: 1mm/hr	50 km :: G	N/A :: Trop
Lau	Radiative Flux, LW	2154	MIMR	PM	TBD	3600	2mm/hr :: 1mm/hr	22 km :: Global	N/A :: Sfc
			CERES	TRM,AM,PM	Barkstrom	2182	10W/m ² :: 10%	500 km :: G	N/A :: Sfc
Lau	Radiative Flux, SW	2215	AIRS	PM	Gautier	2176*	5 W/m ² :: 2 W/m ²	1.25 x 1.25 dg :: G	N/A :: Sfc
			AIRS	PM	Gautier	2177*	<15 :: TBD	50 km :: Land	N/A :: Sfc
Lau	River Channel Geometry, Major-stream	3049	CERES	TRM,AM,PM	Barkstrom	2230	10W/m ² :: 10%	500 km :: G	N/A :: Sfc
			CERES	TRM,AM,PM	Barkstrom	2228	10 W/m ² :: 2 W/m ²	1.25 x 1.25 dg :: G	N/A :: Sfc
Lau	Sea_sfc Temperature (SST)	2514	CERES	TRM,AM,PM	Barkstrom	2248	10 W/m ² :: 2 W/m ²	1.25 x 1.25 dg :: G	N/A :: Sfc
			AIRS	PM	Gautier	2232*	<15 :: <5	50 km :: Land	N/A :: Sfc
Lau	Sea_sfc Temperature (SST)	2515	AIRS	PM	Gautier	2233*	<10 :: <5	50 km :: Ocean	N/A :: Sfc
			HIRIS	AM2	Kieffer, Clark	2884	10 :: 10	30 m :: Land/R	N/A :: Sfc
Lau	Sea_sfc Temperature (SST)	2516	MODIS	AM,PM	Brown, Barton	2532	0.5 K ::	30 m :: L	N/A :: Sfc
			AIRS	PM	Chedin, Fleming	2523*	0.3-0.4K :: 0.1-0.6K	100 km :: Ocean	N/A :: Sfc
Lau	Sea_sfc Temperature (SST)	2517	MODIS	AM,PM	Brown	2527	0.5 - 1 K :: 0.4 - 0.5 K	50 km :: Ocean	N/A :: Sfc
			MODIS	AM,PM	Brown	2528	0.3-0.6K :: 0.1-0.3K	20 km :: Ocean/G,R	N/A :: Sfc
Lau	Sea_sfc Temperature (SST)	2518	MODIS	AM,PM	Brown, Barton	2531	0.3-0.6K :: 0.1-0.3K	20 km :: Ocean/G,R	N/A :: Sfc
			MIMR	PM	TBD	3603	0.5 - 1 K :: 0.4 - 0.5 K	50 km :: Ocean	N/A :: Sfc
Lau	Sea_sfc Temperature (SST)	2519	MODIS	AM,PM	Brown, Barton	2532	0.2 K :: 0.2 K	200 km :: Ocean	N/A :: Sfc
			MODIS	AM,PM	Brown	2527	0.3-0.4K :: 0.1-0.6K	50 km :: Ocean	N/A :: Sfc
Lau	Sea_sfc Temperature (SST)	2520	MODIS	AM,PM	Brown	2528	0.3-0.5 K :: 0.1-0.3 K	1 km :: Ocean/L	N/A :: Sfc
			MODIS	AM,PM	Brown, Barton	2531	0.3-0.6K :: 0.1-0.3K	20 km :: Ocean/G,R	N/A :: Sfc
Lau	Sea_sfc Temperature (SST)	2521	AIRS	PM	Chedin, Fleming	2523*	0.3-0.6K :: 0.1-0.3K	20 km :: Ocean/G,R	N/A :: Sfc
			MIMR	PM	TBD	3603	0.5 - 1 K :: 0.4 - 0.5 K	50 km :: Ocean	N/A :: Sfc
Lau	Sea_sfc Temperature (SST)	2522	MODIS	AM,PM	Brown, Barton	2532	0.5 K ::	1 dg :: Ocean	N/A :: Sfc
			AIRS	PM	Chedin, Fleming	2523*	0.3-0.4K :: 0.1-0.6K	50 km :: R	N/A :: Sfc
Lau	Snow Cover	3012	MODIS	AM,PM	Brown, Barton	2532	0.5 - 1 K :: 0.4 - 0.5 K	50 km :: Ocean	N/A :: Sfc
			AIRS	PM	Chedin, Fleming	2523*	0.3-0.6K :: 0.1-0.3K	50 km :: Ocean	N/A :: Sfc
Lau	Snow Cover	3013	MODIS	AM,PM	Brown	2528	0.3-0.6K :: 0.1-0.3K	20 km :: Ocean/G,R	N/A :: Sfc
			MIMR	PM	TBD	3603	0.3-0.6K :: 0.1-0.3K	20 km :: Ocean/G,R	N/A :: Sfc
Lau	Soil Moisture	2965	ASTER	AM1	TBD	3634	50 :: 10	60 km :: Ocean	N/A :: Sfc
			HIRIS	AM2	Dozier	3019	TBD :: TBD	100 m :: Land/L	N/A :: Sfc
Lau	Soil Moisture	2966	MODIS	AM,PM	Salomonson	3021	5% :: 2%	50 m :: Cryo/L	N/A :: Sfc
			MODIS	AM,PM	Salomonson	3020	<=5% :: <=5%	1 km :: Land/L	N/A :: Sfc
Lau	Soil Moisture	2967	MODIS	AM,PM	Salomonson	3021	<=5% :: <=5%	1 km :: Land/R	N/A :: Sfc
			MIMR	PM	TBD	3605	<=5% :: <=5%	10 km :: Land	N/A :: Sfc
Lau	Soil Moisture	2968	MODIS	AM,PM	Salomonson	3021	10% :: 5%	3 km :: Land/R	N/A :: Sfc
			MIMR	PM	TBD	3605	10% :: 5%	60 km :: Land	N/A :: Sfc

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product					Accuracy	Temporal	Horizontal	Vertical	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	
Lau	Soil Temperature	2501	ASTER	AM1	Kahle, Becker, Qi	2483	BM	0.5 K :: 0.5 K 1.6 K :: 0.3 K	1/(3 day) 1/(2-16 day)	100 m :: Land/L	100 m :: Land/L	N/A :: Sfc N/A :: Sfc
Lau	Soil Temperature	2502	MODIS	AM,PM	Wan	2484	BM	1 K :: 1 K 1 C :: 1 C	1/(3 day) 1/day, 1/wk	1 km :: Land/R	1 km :: Land/R	N/A :: Sfc N/A :: Sfc
Lau	Surface Water Area	3060	ASTER	AM1	Kahle, Becker, Qi	2483	AM	1.6 K :: 0.3 K 100 ::	1/(2-16 day) 1/wk	90 m :: Land	90 m :: Land	N/A :: Sfc N/A :: Sfc
Lau	Surface Water Area	3061	ASTER	AM1	TBD	3633	BM	TBD :: TBD 100 ::	TBD 1/wk	TBD :: Land/TBD	TBD :: Land/TBD	TBD :: TBD N/A :: Sfc
Lau	Temperature Profile	1578	ASTER	AM1	TBD	3633	BM	TBD :: TBD 10% :: 5%	TBD 1/mo, 1/season	TBD :: Land/TBD	TBD :: Land/TBD	TBD :: TBD N/A :: Sfc
Lau	Topographic Elevation, Land_sfc, (DEM)	2835	AIRS	PM	Chedin, Fleming,	1588	BM	1.0 K :: 0.4 K 10 m :: 1 m	2/day [d,n] 1/mission	15 x 50 - 50 x 50 km :: G	15 x 50 - 50 x 50 km :: G	1, 2 km :: Atmos N/A :: Sfc
Lau	Vegetation Evapotrans	1788	ASTER	AM1	Kahle, JGI	2828	BM	>50 m :: >30 m 10% :: 10%	1/mission 1/day	10 m :: Land/L,R	15 m :: Land/R,L	30 m :: Sfc N/A :: Sfc
Lau	Vegetation Evapotrans, Actual, (AET)	1801	ASTER	AM1	Schmugge	1791	BM	1 mm/day :: 0.5 mm/day 10% :: 10%	1/day 1/day	90 m :: Land/R,L	90 m :: Land/R,L	N/A :: Sfc N/A :: Sfc
Lau	Vegetation Evapotrans, Actual, (AET)	1802	ASTER	AM1	Schmugge	1791	BM	1 mm/day :: 0.5 mm/day 10% :: 10%	1/day 1/day	90 m :: Land/R,L	10 km :: Land/R	N/A :: Sfc N/A :: Sfc
Lau	Vegetation Evapotrans, Potential	1804	ASTER	AM1	Schmugge	1791	BM	1 mm/day :: 0.5 mm/day 10% :: 10%	1/day 1/day	90 m :: Land/R,L	10 km :: Land/R	N/A :: Sfc N/A :: Sfc
Lau	Vegetation Index, Leaf Area, (LAI)	2677	MODIS	AM,PM	Running	2680*	BM	0.1-0.25 :: 5-20%	1/day, 1/wk 1/season	pixel_size :: Land/G,R,L	pixel_size :: Land/G,R,L	N/A :: N/A N/A :: Sfc
Lau	Vegetation Type	2734	HIRIS	AM2	Wessman	2644	BM	10% :: 10%	1/(2-16 day)	30 m :: Land/L	30 m :: Land/L	N/A :: Sfc N/A :: Sfc
Lau	Wind Speed	1739	HIRIS	AM2	Ustin et al	2746	AM	20% :: 10%	1/(2-16 day)	30 m :: Land/L	30 m :: Land/L	N/A :: Sfc N/A :: Sfc
Lau	Wind Stress	1743	AIRS	PM	Aurnann	1718*	BM	0.5 m/s :: 2%	2/day	100 km :: G	100 km :: G	N/A :: Sfc N/A :: Sfc
Lau	Wind Stress	1743	STIKSCAT	CHEM	Freilich	1679	AM	7%, 16 deg	1/day 1/(2 day)	50 km :: Ocean	1 dg :: Ocean	N/A :: Sfc N/A :: Sfc
Lau	Wind Stress	1743	MMR	PM	TBD	3594	AM	0.01 ::		39 km :: Ocean	39 km :: Ocean	N/A :: Sfc N/A :: Sfc
Lau	Wind Stress	1743	STIKSCAT	CHEM	Freilich	1746	BM			39 km :: Ocean	39 km :: Ocean	N/A :: Sfc N/A :: Sfc
Lau	Wind Stress	1743	MMR	PM	TBD	3595	BM		1 mo	1 dg :: Ocean	1 dg :: Ocean	N/A :: Sfc N/A :: Sfc
Lau	Wind Stress	1743	MMR	PM	TBD	3594	AM			39 km :: Ocean	39 km :: Ocean	N/A :: Sfc N/A :: Sfc
Liu	Cloud Cover	2055	MODIS	AM,PM	King	2081	BM	10% :: 5%	2/day [d,n], 1/mo	5 km :: G	5 km :: G	N/A :: Cloud N/A :: Cloud
Liu	Cloud Cover	2055	AIRS	PM	Chahine, Chedin,	2062	AM	0.05 :: 0.025	2/day [d,n]	15 x 15 - 50 x 50 km :: G	15 x 15 - 50 x 50 km :: G	N/A :: Cloud N/A :: Cloud
Liu	Cloud Cover	2055	CERES	TRM,AM,PM	Barksstrom	2086	AM	5% :: 2%	6/day [d,n]	25 km :: G	25 km :: G	N/A :: Atmos N/A :: Atmos
Liu	Cloud Cover	2055	MODIS	AM,PM	King	2082	AM	10% :: 5%	1/day, 1/mo	1 dg :: G	1 dg :: G	N/A :: Cloud N/A :: Cloud
Liu	Cloud Cover	2055	CERES	TRM,AM,PM	Barksstrom	2088	AM	5% :: 2%	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	N/A :: Atmos N/A :: Atmos
Liu	Cloud Spectral Char	2546	GLRS-A	ALT	Spinthorne	2078	AM	1% ::	1/(2-16 day)	10-200 km :: G	10-200 km :: G	N/A :: Atmos N/A :: Atmos
Liu	Cloud Spectral Char	2546	AIRS	PM	Chahine, Smith	2128*	BM	0.05 :: 0.025	2/day [d,n]	15 x 15 - 15 x 45 km :: G	15 x 15 - 15 x 45 km :: G	N/A :: Cloud N/A :: Cloud
Liu	Cloud Spectral Char	2546	MISR	AM	Diner	2039*	BM	3% :: 1%	[variable] [d]	1.92 km :: G	1.92 km :: G	N/A :: Trop N/A :: Trop
Liu	Cloud Spectral Char	2546	ASTER	AM1	Kahle, Becker, Qi	2129	AM	N/A :: N/A	1/(0.5-16 day)	90 m :: Land/R,L	90 m :: Land/R,L	N/A :: Sfc N/A :: Sfc

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #			
Liu	Humidity Profile	1817	AIRS	PM	Chedin, Fleming	1828	BM	25 km :: Ocean	0.5 km :: Trop
			AIRS	PM	Rosenkranz	3692	BM	15 x 50 - 50 x 50 km :: G 50 km :: G	2 km :: Atmos 2 km :: Atmos
Liu	Precipitable Water	1866	MIMR	PM	TBD	3596	BM	25 km :: Ocean	Column :: Trop
			AIRS	PM	Chedin, Fleming	1869	AM	22 km :: Ocean	Column :: Trop
			AIRS	PM	Rosenkranz	3693	AM	50 km :: G	N/A :: Trop
			MODIS	AM/PM	Menzel	1875	AM	50 km :: G	N/A :: Trop
Liu	Precipitation Amount, Rain	1973	MIMR	PM	TBD			5 km :: G	N/A :: Atmos
			MIMR	PM	TBD	3600	BM	25 km :: Ocean	N/A :: Trop
Liu	Sea_gfc Temperature (SST)	2517	MODIS	AM/PM	Brown	2529	BM	22 km :: Global	N/A :: Sfc
			MODIS	AM/PM	Brown, Barton	2530	BM	10 km :: G	N/A :: Sfc
			MODIS	AM/PM	Brown	2537	AM	4 km :: Ocean/R.L.	N/A :: Sfc
			MODIS	AM/PM	Brown	2527	AM	4 km :: Ocean/R.L.	N/A :: Sfc
Liu	Temperature Profile	1579						1 km :: Ocean/L	N/A :: Sfc
			AIRS	PM	Chedin, Fleming	1588	BM	25 km :: Ocean	0.5 km :: Trop
Liu	Topographic Elevation, Sea_gfc	3123						15 x 30 - 50 x 50 km :: G	1, 2 km :: Atmos
			ALT	ALT	Fu	3108	BM	1.0 K :: 0.4 K	N/A :: Sfc
			ALT	ALT	Fu	3112	AM	3 cm :: 3 cm	N/A :: Sfc
Liu	Wind Direction	1702	STIKSCAT	CHEM	Freilich	1680	BM	25 km :: Ocean	N/A :: Sfc
			STIKSCAT	CHEM	Freilich	1680	BM	7 km :: Ocean	N/A :: Sfc
Liu	Wind Speed, Sea_gfc	1713	AIRS	PM	Aumann	1718*	AM	25 km :: Ocean	N/A :: Sfc
			MIMR	PM	TBD	3594	AM	25 km :: Ocean	N/A :: Sfc
Moore	Aerosol Conc	1008	HIRIS	AM2	Gerstl	2292	AM-	39 km :: Ocean	N/A :: Sfc
			MISR	AM	Diner	2298*	AM-	1 km :: G	Column :: Atmos
Moore	Aerosol Conc	1009	HIRIS	AM2	Gerstl	2292	AM-	100 m :: L	Column :: Atmos
			MODITT	AM1	Drummond	1126	BM	100 m :: L	Column :: Atmos
Moore	CO Conc	1118	MLS	MO	Waters	1124	AM	100 km :: G	Trop
			AIRS	PM	Revercomb, Strow	1136*	AM	22 km :: G	3-4 km :: 0.15 km
			MODITT	AM1	Drummond	1137	AM	0.1 x 2.5 dg :: 82N-82S	2.5 km :: TPSE, 60 km
			MODIS	AM/PM	King	2081	BM	50 - 250 km :: G	Column :: Atmos
Moore	Cloud Cover	2057	ASTER	AM1	Welch	2080	AM	66 km :: G [dy]	Column :: Atmos
			HIRIS	AM2	Welch	2079	AM	1 km :: G	Column :: Atmos
			MODIS	AM/PM	Menzel	2126	BM	1 km :: G	Column :: Atmos
			CERES	TRM/AM/PM	Chahine, Smith	2128*	AM	1 km :: G	Column :: Atmos
Moore	Cloud Radiation	2360	MODIS	AM/PM	Menzel	2126	BM	1 km :: G	Column :: Atmos
			AIRS	PM	Chahine, Smith	2128*	AM	1 km :: G	Column :: Atmos
			CERES	TRM/AM/PM	Barkstrom	2147	AM	1 km :: G	Column :: Atmos
			AIRS	PM	Chedin, Revercomb	1332*	BM	1 km :: G	Column :: Atmos
Moore	O3 Conc	1309	MODIS	AM/PM	Menzel	1334	AM	1 km :: G	Column :: Atmos
			HIRDLS	CHEM	Barnett, Gille	1318	AM	1 km :: G	Column :: Atmos
			AIRS	PM	Chedin, Revercomb	1332*	BM	1 km :: G	Column :: Atmos

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product							Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Cover.	Vertical Resol :: Cover.		
Moore	O3 Conc	1309	TES	CHEM	Beer	1324	AM	:: 3 ppb	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km		
			TES	CHEM	Beer	1325	AM	:: 13 ppb	1/(16 day)	16 x 5 km :: G	4-6 km :: 0-12 km		
Moore	PAR	2328	SAGE-III	AERO,CHEM	McCormick	1321	AM	6% :: 5%	1/(2 min), 30/day	<2 x <1 dg :: Polar	1 km :: 6-85 km		
									20% :: 10%	1/day, 1/wk	30 m :: Land/L	30 m :: 6-85 km	
Moore	PAR	2329	HIRIS	AM2	Ustin, Westman	2030	BM	25% :: 10%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc		
									20% :: 10%	1/day, 1/wk	500 m :: Land/R	N/A :: Sfc	
Moore	Pigment Conc, Non-photosynthetic	2695	MODIS	AM,PM	Tarre	2268*	BM	200 :: 5 - 20%	1/day, 1/wk	1 km :: G,R	N/A :: Atmos		
			MODIS	AM,PM	Estias	2330*	AM		TBD :: TBD	1/day	N/A :: G	N/A :: Atmos	
Moore	Pigment Conc, Non-photosynthetic	2696	HIRIS	AM2	Westman, Aber	2648	AM-	20% :: 20%	1/(16 day)	1 km :: Land/R	:: S/c		
			HIRIS	AM2	Westman, Aber	2687	AM-		40% :: 20%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc	
Moore	Precipitation Amount, Rain	1974	HIRIS	AM2	Westman, Aber	2648	AM-	20% :: 20%	1/(16 day)	30 m :: Land/L	N/A :: Sfc		
			HIRIS	AM2	Westman, Aber	2687	AM-		40% :: 20%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc	
Moore	River Floodplain Extent	2915	AIRS	PM	Susskind	1969*	BM	10% :: 10%	1/wk	1 km :: G	N/A :: Trop		
			AIRS	PM	Staelin	3694*	AM		2mm/day :: 1mm/day	2/day [d,n]	50 km :: G	N/A :: Trop	
Moore	Snow Liq-water Content	3027	MIMR	PM	TBD	3600	AM	2mm/hr :: 1mm/hr	2/day [d,n]	22 km :: Global	N/A :: Sfc		
			GLRS-A	ALT	Schutz et al	2858	AM		20% :: 20%	1/wk	1-25 km :: Land	100-500 mm :: Sfc	
Moore	Soil Extent	2800	HIRIS	AM2	Dozier	2943	BM	100% :: 100%	1/wk, 1mo	1 km :: Land	N/A :: Sfc		
			ASTER	AM1	Kahle, Gillespie	2803*	BM		15% :: 15%	1/yr	1 km :: Land	N/A :: Sfc	
Moore	Soil Moisture	2966	ASTER	AM1	Gillespie	2801	BM	50 maps/mission	50 scenes/mission	90 m :: Land/R,L	N/A :: Sfc		
			MODIS	AM,PM	Strahler, Huete et	2669	AM		10% :: 5%	1mo, 1/season	1 km :: Land	N/A :: Sfc	
Moore	Topographic Elevation, Land_sfc	2827	MIMR	PM	TBD	3605	BM	30% :: 30%	1/wk, 1mo	1-25 km :: Land	N/A :: Sfc		
			MISR	AM	Diner	2846*	BM		1m ::	1/mission	500 m :: Land	N/A :: Sfc	
Moore	Vegetation Biomass, Green	2618	ASTER	AM1	Kahle, JGI	2828	AM	100 m :: 100 m	1/mission	15 m :: Land/R,L	30 m :: Sfc		
			HIRIS	AM2	Ustin, Westman	2620	BM		>50 m :: >30 m	1/(2-16 day)	500 m :: Land/R	N/A :: Sfc	
Moore	Vegetation Biomass, Green	2619	HIRIS	AM2	Ustin, Westman	2620	BM	40% :: 15%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc		
			HIRIS	AM2	Ustin, Westman	2620	BM		30% :: 15%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc	
Moore	Vegetation Cellulose Conc	2647	HIRIS	AM2	Westman, Aber	2648	BM	40% :: 15%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc		
			HIRIS	AM2	Westman, Aber	2648	BM		20% :: 20%	1/(16 day)	30 m :: Land/L	N/A :: Sfc	
Moore	Vegetation Chlorophyll Conc	2649	HIRIS	AM2	Ustin, Westman	2653	BM	20% :: 10%	1/day, 1/wk	30 m :: Land/L	N/A :: Sfc		
			HIRIS	AM2	Ustin, Westman	2653	BM		25% :: 10%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc	
Moore	Vegetation Chlorophyll Conc	2650	HIRIS	AM2	Ustin, Westman	2653	BM	20% :: 10%	1/day, 1/wk	1 km :: Land/R	N/A :: Sfc		
			ASTER	AM1	Schmugge	1791	BM		25% :: 10%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc	
Moore	Vegetation Evapotrans	3037	ASTER	AM1	Schmugge	1791	BM	20% :: 20%	1/day, 1/wk	500 m :: R	N/A :: Sfc		
			ASTER	AM1	Schmugge	1791	BM		1 mm/day :: 0.5 mm/day	1/day, 1/wk	90 m :: Land/R,L	N/A :: Sfc	
Moore	Vegetation Evapotrans	3058	ASTER	AM1	Schmugge	1791	BM	20% :: 20%	1/day, 1/wk	30 m :: L	N/A :: Sfc		
			MODIS	AM,PM	Strahler, Huete et	2669	BM		1 mm/day :: 0.5 mm/day	1/yr	90 m :: Land/R,L	N/A :: Sfc	
Moore	Vegetation Extent	2721	MODIS	AM,PM	Strahler, Huete et	2669	BM	15% :: 15%	1mo, 1/season	1 km :: Land	N/A :: Sfc		
			MODIS	AM,PM	Strahler, Huete et	2669	BM		10% :: 5%	1mo, 1/season	1 km :: Land	N/A :: Sfc	

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product					Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel			
Moore	Vegetation Extent	2721	MODIS	AM,PM	Justice, Huete et al	2751	AM-	0.01 :: 0.01	1/day, 1/wk, 1/mo	1 km :: Land/R	N/A :: Sfc
Moore	Vegetation Leaf Water Content	2760	HIRIS	AM2	Ustin, Westman	2741	AM	20% :: 10%	1/(2-16 day)	30 m :: Land/R	N/A :: Sfc
Moore	Vegetation Lignin Conc	2684	HIRIS	AM2	Westman, Goetz	2761	BM	20% :: 20%	1/day, 1/wk	30 m :: Land/L	N/A :: Sfc
Moore	Vegetation Temperature	2535	HIRIS	AM2	Westman, Aber	2687	BM	20% :: 20%	1/(16 day)	30 m :: Land/L	N/A :: Sfc
Moore	Vegetation Type	2736	MODIS	AM,PM	Wan	2484	BM	1 C :: 1 C	1/day, 1/wk	30 m :: Land/L	N/A :: Sfc
Moore	Vegetation Type	2736	ASTER	AM1	Kahle, Becker, C	2483	BM	1-6 K :: 0.3 K	1/(2-16 day)	1 km :: Land/R	N/A :: Sfc
Moore	Vegetation Type	2736	MODIS	AM1	Kahle, Becker, C	2483	BM	15% :: 15%	1/yr	90 m :: Land	N/A :: Sfc
Moore	Vegetation Type	2736	MODIS	AM,PM	Strahler, Huete et al	2669	BM	10% :: 5%	1/mo, 1/season	1 km :: Land	N/A :: Sfc
Moore	Vegetation Type	2736	MODIS	AM,PM	Justice, Huete et al	2750	AM	0.01 :: 0.01	1/day, 1/wk, 1/mo	0.5 km :: Land/R	N/A :: Sfc
Moore	Vegetation Type	2736	MODIS	AM,PM	Justice, Huete et al	2751	AM	0.01 :: 0.01	1/day, 1/wk, 1/mo	1 km :: Land/R	N/A :: Sfc
Moore	Vegetation Water Content	2762	HIRIS	AM2	Westman, Goetz	2761	AM-	20% :: 20%	1/day, 1/wk	30 m :: Land/L	N/A :: Sfc
Moore	Vegetation Water Content	2762	HIRIS	AM2	Westman, Goetz	2761	AM-	50% :: 20%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc
Mouginis-Mark	Aerosol Conc, Stratospheric	3263	HIRDLS	CHEM	Barnett, Gille	1992	BM	5-10% :: 1-10%	1/wk	4 x 4 dg :: G	1 km :: 7-30 km
Mouginis-Mark	Aerosol Conc, Stratospheric	3263	SAGE-III	AERO,CHEM	McCormick	1012	AM	5% :: 5%	2/day [d,n]	1 km :: 7-30 km	1 km :: 0-40 km
Mouginis-Mark	Aerosol Conc, Tropospheric	3264	SAGE-III	AERO,CHEM	McCormick	1012	BM	5-10% :: 1-10%	1/(2 min), 30/day	4 x 4 dg :: G	1 km :: 0-40 km
Mouginis-Mark	Eruption-Plume Dispersal	3273	HIRDLS	CHEM	Barnett, Gille	1992	AM	5-10% :: 1-10%	1/(2 min), 30/day	4 x 4 dg :: G	1 km :: 7-30 km
Mouginis-Mark	Eruption-Plume Dispersal	3273	ASTER	AM1	Pieri	3301	BM	1 km ::	1/orbit, 1/day	1 km :: Land/L	N/A :: Plume_col
Mouginis-Mark	Eruption-Plume Dispersal	3273	MISR	AM	Diner	2298*	AM	variable :: variable	2/day [d,n]	15,30,90 m :: R/L	Column :: Atmos
Mouginis-Mark	Eruption-Plume Dispersal	3273	HIRIS	AM2	Gerstl	2292	AM	0.05/10% :: 0.05/10%	1/(5-16 day) [d]	192 km :: R	Column :: Atmos
Mouginis-Mark	Eruption-Plume Dispersal	3273	HIRIS	AM2	Gerstl	2292	AM	0.05 :: 0.01	1/(2-16 day)	100 m :: L	Column :: Atmos
Mouginis-Mark	Eruption-Plume Dispersal	3273	MODIS	AM,PM	Kaufman, Tanne	1017	BM	30% :: 10%	1/day	1 km :: Land/R	N/A :: Plume_col
Mouginis-Mark	Eruption-Plume Dispersal	3273	ASTER	AM1	Pieri	3301	BM-	variable :: variable	1/day, 1/mo	0.5 dg :: G,R	N/A :: Atmos
Mouginis-Mark	Eruption-Plume Dispersal	3273	TES	CHEM	Beer	3638	BM	variable :: variable	1/day	15,30,90 m :: R/L	N/A :: Atmos
Mouginis-Mark	Eruption-Plume Dispersal	3273	MLS	MO	Waters	1188	AM	16 x 5 km :: L	1/(16 day)	16 x 5 km :: L	N/A :: Plume_col
Mouginis-Mark	Eruption-Plume Dispersal	3273	MLS	MO	Waters	1189	AM	<=5% :: 0.1-10x10-10	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: TPSE, 90 km
Mouginis-Mark	Eruption-Plume Dispersal	3273	SAFIRE	MO	Russell	1187	AM	<=5% :: 0.1-10x10-10	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: TPSE, 80 km
Mouginis-Mark	Eruption-Plume Dispersal	3273	SAFIRE	MO	Russell	1187	AM	25 x 2.5-5 dg :: 86S-86N	1/(36-72 s) [?]	25 x 2.5-5 dg :: 86S-86N	3 km :: 10-65 km
Mouginis-Mark	Eruption-Plume Height	3285	MISR	AM	Diner	3286*	BM	200m(wr) ::	1/day	1 km :: Land/R	N/A :: Plume_col
Mouginis-Mark	Eruption-Plume Height	3285	GLRS-A	ALT	Spinliffe et al	1014	AM	100 m :: 100 m	[variable] [d]	500 m :: Land/L	N/A :: Plume_top
Mouginis-Mark	Eruption-Plume Height	3285	GLRS-A	ALT	Spinliffe et al	1014	AM	150 m ::	1/(2-16 day)	2-200 km :: G	75 m :: Atmos
Mouginis-Mark	Eruption-Plume Temperature	3293	ASTER	AM1	Pieri	3301	BM-	10 C ::	2/day [d,n]	100 m :: R	N/A :: Plume_col
Mouginis-Mark	Eruption-Plume Temperature	3293	ASTER	AM1	Pieri	3301	BM-	variable :: variable	15,30,90 m :: R/L	15,30,90 m :: R/L	N/A :: Plume_col
Mouginis-Mark	Eruption-Plume SO2 Conc Spike	3288	TES	CHEM	Beer	1370	BM	[near-real time ?]	1/(16 day)	1 km :: G	N/A :: Plume_col
Mouginis-Mark	Eruption-Plume SO2 Conc Spike	3288	MLS	MO	Waters	1369	AM	600 ppt	1/(16 day)	160 x 23 km :: G	2.3 km :: 4-12 km
Mouginis-Mark	Eruption-Plume SO2 Conc Spike	3288	MLS	MO	Waters	1369	AM	5x10-10	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 30 km
Mouginis-Mark	Eruption-Plume SO2 Content (Mass Eruption)	3289	TES	CHEM	Beer	1370	BM	1 km ::	1/day	1 km :: G	N/A :: Plume_col
Mouginis-Mark	Eruption-Plume SO2 Content (Mass Eruption)	3289	MLS	MO	Waters	1369	AM	600 ppt	1/(16 day)	160 x 23 km :: G	2.3 km :: 4-12 km
Mouginis-Mark	Eruption-Plume SO2 Content (Mass Eruption)	3289	MLS	MO	Waters	1369	AM	5x10-10	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 30 km
Mouginis-Mark	Lake Water Temperature, Volcano Summit	3291	ASTER	AM1	Kahle, Becker, Cl	2483	BM	2 C ::	1/(3 mo)	100 m :: Land/L	N/A :: Sfc
Mouginis-Mark	Lake Water Temperature, Volcano Summit	3291	ASTER	AM1	Kahle, Becker, Cl	2483	BM	1-6 K :: 0.3 K	1/(2-16 day)	90 m :: Land	N/A :: Sfc

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product							Accuracy	Temporal	Horizontal	Vertical
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.	
Mouginis-Mark	Lava-Flow Advance Rate	3262	ASTER	AM1	Kahle, Becker, C	2483	BM	30 m/hor :: 1-6 K :: 0.3 K	2/day [d,n]	30 m :: Land/L	90 m :: Land	N/A :: Sfc	
			HIRIS	AM2	Rowan, Goetz	3299	AM		1/(2-16 day)	30 m :: Land/L	N/A :: Sfc		
			HIRIS	AM2	Rowan, Goetz	3294	AM	10 C :: 5 C	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc		
Mouginis-Mark	Lava-Flow Areal Change	3266	ASTER	AM1	Kahle, Becker, C	2483	BM	(30m)/2 :: 1-6 K :: 0.3 K	2/day [d,n]	30 m :: Land/L	90 m :: Land	N/A :: Sfc	
			HIRIS	AM2	Rowan, Goetz	3299	AM		1/(2-16 day)	30 m :: Land/L	N/A :: Sfc		
			HIRIS	AM2	Rowan, Goetz	3294	AM	10 C :: 5 C	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc		
Mouginis-Mark	Lava-Flow Temperature	3292	ASTER	AM1	Kahle, Becker, C	2483	BM	1-6 K :: 0.3 K	1/(2-16 day)	90 m :: Land	90 m :: Sfc		
			HIRIS	AM2	Rowan, Goetz	3294	AM	10 C :: 5 C	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc		
Mouginis-Mark	Temperature, PBL	3302	ASTER	AM1	Pieri	3301	BM-	variable :: variable	1/day	30 m :: Land/L	30 m :: Plume col		
Mouginis-Mark	Volcano Deformation	3269	GLRS-A	ALT	Spinthorne et al	1514	BM	150 m :: 1 cm/ver ::	1/(2-16 day)	2-200 km :: G	75 m :: Trop		
			GLRS-A	ALT	Schutz et al	3271	BM	5/yr-100/d :: 1 cm/ver ::	1/day	1 km :: Land/L	N/A :: Sfc		
Mouginis-Mark	Volcano Elevation Change	3274	GLRS-A	ALT	Schutz et al	3271	BM	1-5 (ver) :: 5/yr-100/d ::	2/day [d,n]	30 m :: Land/L	N/A :: Sfc		
Mouginis-Mark	Volcano Elevation Change	3278	GLRS-A	ALT	Schutz et al	3271	BM	5/yr-100/d :: 10 m/ver ::	1/day, 1/yr	1 km :: Land/L	N/A :: Sfc		
Mouginis-Mark	Volcano Elevation Change	3278	GLRS-A	ALT	Cohen, Schutz et	2831	BM	5 mm/yr :: 10 m/ver ::	1/yr	100-900 km :: Land/R	N/A :: Sfc		
Mouginis-Mark	Volcano Elevation, Reference	3276	ASTER	AM1	Kahle, JGI	2828	BM	>50 m :: >30 m	1/mission	30 m :: Land/L	N/A :: Sfc		
			MISR	AM	Diner	2846*	AM	100 m :: 100 m	1/mission	500 m :: Land	N/A :: Sfc		
Mouginis-Mark	Volcano Morphology	3284	GLRS-A	ALT	Schutz et al	2858	BM	100-500mm :: 5 mm/yr ::	4/yr	30 m :: Land/L	N/A :: Sfc		
Mouginis-Mark	Volcano Roughness	3287	GLRS-A	ALT	Cohen, Schutz et	2831	AM	100-500mm :: 5 mm/yr ::	1/wk, 1/yr	0.1-10 km :: Land	100-500 mm :: Sfc		
Mouginis-Mark	Volcano Temperature, Eruption Spike	3290	MODIS	AM,PM	Tanre, Muller	1556*	BM	3-24 cm :: 15% :: 5 - 8%	1/yr	30 m :: Land/L	N/A :: Sfc		
Mouginis-Mark	Volcano Temperature, Eruption Spike	3290	MODIS	AM,PM	Wan	2484	BM	10 C :: 1 C :: 1 C	1/day, 1/wk	1 km :: G	N/A :: Sfc		
Mouginis-Mark	Volcano Temperature-Change	3295	HIRIS	AM2	Rowan, Goetz	3294	AM	10 C :: 5 C	1/day, 1/wk	1 km :: Land/R	N/A :: Sfc		
Mouginis-Mark	Volcano Temperature-Change	3295	ASTER	AM1	Kahle, Becker, C	2483	BM	10 C :: 5 C	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc		
Mouginis-Mark	Volcano Temperature-Change	3295	HIRIS	AM2	Rowan, Goetz	3294	AM-	1-6 K :: 0.3 K	1/yr	90 m :: Land	N/A :: Sfc		
Murakami	Aerosol Extinction Coef	2327	HIRDLS	CHEM	Barnett, Gille	1992	BM	5-10% :: 5-10% :: 1-10%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc		
Murakami	Aerosol Extinction Coef	2327	MODIS	AM,PM	Tanre, Kaufman	2294	AM	10 C :: 5 C	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc		
Murakami	Aerosol Extinction Coef	2327	MISR	AM	Diner	2298*	AM	5-10% ::	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc		
Murakami	Aerosol Extinction Coef	2327	SAGE-III	AERO,CHEM	McCormick	1012	AM	1-6 K :: 0.3 K	1/(2-16 day)	90 m :: Land	N/A :: Sfc		
Murakami	Aerosol Extinction Coef	2327	GLRS-A	ALT	Spinthorne et al	2291	AM	10 C :: 5 C	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc		
Murakami	Cloud Cover	2058	CERES	TRM,AM,PM	Barkstrom	2088	BM	5-10% ::	2/day [d,n]	4 x 4 dg :: G	N/A :: Atmos		
Murakami	Cloud Cover	2058	AIRS	PM	Chahine, Chedin	2062	AM	5-10% ::	1/day, 1/mo	0.5 dg :: G	1 km :: 7-30 km		
Murakami	Cloud Cover	2058	MODIS	AM,PM	King	2081	AM	0.05 :: 0.02	1/(5-16 day) [d]	0.5 dg :: Ocean	N/A :: Atmos		
Murakami	Cloud Cover	2058	CERES	TRM,AM,PM	Barkstrom	2086	AM	0.05/10% :: 0.05/10%	1/(2 min), 30/day	1.92 km :: R	Column :: Atmos		
Murakami	Cloud Cover	2058	GLRS-A	ALT	Spinthorne	2078	AM	5% :: 5%	1/(2-16 day)	<2 x <1 dg :: G	1 km :: 0-40 km		
Murakami	Cloud Cover	2058	GLRS-A	ALT	Spinthorne	2078	AM	20% ::	1/(2-16 day)	2-200 km :: G	N/A :: Atmos		
Murakami	Cloud Cover	2058	GLRS-A	ALT	Spinthorne	2078	AM	10% ::	1/(2-16 day)	2-200 km :: G	N/A :: Cloud		
Murakami	Cloud Cover	2058	CERES	TRM,AM,PM	Barkstrom	2088	BM	5% :: 2%	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	N/A :: Atmos		
Murakami	Cloud Cover	2058	AIRS	PM	Chahine, Chedin	2062	AM	5% :: 2%	2/day [d,n]	15 x 15 - 50 x 50 km :: G	N/A :: Cloud		
Murakami	Cloud Cover	2058	MODIS	AM,PM	King	2081	AM	0.05 :: 0.025	2/day [d,n], 1/mo	5 km :: G	N/A :: Cloud		
Murakami	Cloud Cover	2058	CERES	TRM,AM,PM	Barkstrom	2086	AM	10% :: 5%	6/day [d,n]	25 km :: G	N/A :: Atmos		
Murakami	Cloud Cover	2058	GLRS-A	ALT	Spinthorne	2078	AM	5% :: 2%	1/(2-16 day)	10-200 km :: G	N/A :: Atmos		

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Murakami	Cloud Height, Top	1418	CERES	TRM,AM,PM	Barkstrom	1430	BM	1.0 km :: 0.1 km	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	0.1 km :: Atmos
			AIRS	PM	Chahine, Chedin,	1423*	AM	0.5 km :: 0.25 km	2/day [dn]	15 x 15 - 50 x 50 km :: G	N/A :: Cloud
			CERES	TRM,AM,PM	Barkstrom	1431	AM	0.5 km :: 0.1 km	1/(6 hr)	1.25 x 1.25 dg :: G	0.1 km :: Atmos
			EOSP	AERO,AM2	Travis	1530	AM	30 mb :: 30 mb	1/day [d]	40 km :: G	30 mb :: Cloud
			HIRDLS	CHEM	Barnett, Gille	1531	AM	5-10% :: 5-10%	2/day [dn]	4 x 4 dg :: G	0.4 km :: Trop
			MODIS	AM,PM	Menzel	1528	AM	50 mb :: 20 mb	2/day	5 km :: G	N/A :: Cloud
			MODIS	AM,PM	Menzel	1529	AM	50 mb :: 20 mb	1/day, 1/mo	1 dg :: G	N/A :: Cloud
			AIRS	PM	Chedin, Fleming,	1828	BM	10% :: 5%	2/day [dn]	15 x 50 - 50 x 50 km :: G	2 km :: Atmos
			HIRDLS	CHEM	Barnett, Gille	1318	BM	5-10% :: 1-10%	2/day [dn]	4 x 4 dg :: G	N/A :: TOA
			SAGE-III	AERO,CHEM	McCormick	1321	BM	6% :: 5 %	1/(2 min), 30/day	<2 x <1 dg :: Polar	1 km :: 7-85 km
Murakami	O3 Conc	1310	MLS	MO	Waters	1319	AM	<= 3% :: 1%(<50km)	2/day [dn]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 110 km
			SAFIRE	MO	Russell	1320	AM	5% (10-70 km)	1/(18-72 s) [?]	25 x 2.5-5 dg :: 86S-86N	1.5-3 km :: 10-100 km
			TES	CHEM	Beer	1323	AM	20 ppb	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km
			TES	CHEM	Beer	1324	AM	3 ppb	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km
			TES	CHEM	Beer	1325	AM	13 ppb	1/(16 day)	16 x 5 km :: G	4-6 km :: 0-12 km
			MODIS	AM,PM	Menzel	1333	BM	5-10% :: 2-10%	2/day, 1/day	5 km :: G	Column :: Atmos
			MODIS	AM,PM	Menzel	1334	AM	15-20DU :: 10DU	1/day, 1/mo	0.5 dg :: G	Column :: Atmos
			AIRS	PM	Chedin, Reveron	1332*	AM	5-15% :: 3-10%	2/day [dn]	50 km :: G	Column :: Atmos
			AIRS	PM	Chedin, Fleming,	1869	BM	20% ::	2/day [dn]	50 km :: G	N/A :: Trop
			MODIS	AM,PM	Menzel	1875	BM	5% :: 3%	2/day	5 km :: G	N/A :: Atmos
Murakami	Precipitable Water	1867	MODIS	AM,PM	Kaufman, Tarré	1874	AM	10 mm :: 5 mm	1/day	5 km :: Land	N/A :: Atmos
			AIRS	PM	Rosenkranz	3693	AM	8% :: 6%	2/day [dn]	50 km :: G	N/A :: Atmos
			AIRS	PM	Susskind	1969*	BM	2 mm :: 1 mm	2/day [dn]	50 km :: G	N/A :: Trop
			MIMR	PM	TBD	3601	BM	2mm/day :: 1mm/day	2/day [dn]	50 km :: G	N/A :: Trop
			AIRS	PM	Saein	3694*	AM	2mm/hr :: 1mm/hr	1 mo	1 dg :: Global	N/A :: Sfc
			MIMR	PM	TBD	3600	AM	2mm/hr :: 1mm/hr	2/day [dn]	50 km :: G	N/A :: Trop
			CERES	TRM,AM,PM	Barkstrom	2182	BM	10% ::	2/day [dn]	22 km :: Global	N/A :: Sfc
			AIRS	PM	Gautier	2176*	AM	2% ::	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	N/A :: Atmos
			AIRS	PM	Gautier	2177*	AM	5 W/m ² :: 2 W/m ²	1/day	50 km :: Land	N/A :: Sfc
			CERES	TRM,AM,PM	Barkstrom	2180	AM	<15 :: TBD	1/day	50 km :: Ocean	N/A :: Sfc
Murakami	Radiative Flux, LW, Up	2183	CERES	TRM,AM,PM	Barkstrom	2181	AM	<10 :: TBD	6/day [dn]	1.25 x 1.25 dg :: G	N/A :: Sfc
			CERES	TRM,AM,PM	Barkstrom	2181	AM	7 W/m ² :: 2 W/m ²	1/(6 hr)	1.25 x 1.25 dg :: G	N/A :: Sfc
			CERES	TRM,AM,PM	Barkstrom	2181	AM	7 W/m ² :: 2 W/m ²	1/(6 hr)	1.25 x 1.25 dg :: G	N/A :: Sfc
			CERES	TRM,AM,PM	Barkstrom	2200	BM	10% ::	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	N/A :: Sfc
			CERES	TRM,AM,PM	Barkstrom	2204	AM	3 W/m ² :: 1 W/m ²	1/day	1.25 x 1.25 dg :: G	N/A :: TOA
			CERES	TRM,AM,PM	Barkstrom	2205	AM	5 W/m ² :: 2 W/m ²	1/(6 hr)	1.25 x 1.25 dg :: G	N/A :: TOA
			CERES	TRM,AM,PM	Barkstrom	2205	AM	5 W/m ² :: 2 W/m ²	6/day [dn]	25 km :: G	N/A :: TOA
			CERES	TRM,AM,PM	Barkstrom	2230	BM	2% ::	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	N/A :: Atmos
			AIRS	PM	Gautier	2232*	AM	10 W/m ² :: 2 W/m ²	1/day	1.25 x 1.25 dg :: G	N/A :: Sfc
			MODIS	AM,PM	Brown	2528	BM	<15 :: <5	1/day	50 km :: Land	N/A :: Sfc
Murakami	Sea_sfc Temperature (SST)	2518	MODIS	AM,PM	Brown	2528	BM	0.2 K ::	1/day, 1/wk, 1/mo	20 km :: Ocean/G.R	N/A :: Sfc
			MODIS	AM,PM	Brown	2528	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G.R	N/A :: Sfc
			MODIS	AM,PM	Brown	2528	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G.R	N/A :: Sfc
			MODIS	AM,PM	Brown	2528	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G.R	N/A :: Sfc
			MODIS	AM,PM	Brown	2528	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G.R	N/A :: Sfc
			MODIS	AM,PM	Brown	2528	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G.R	N/A :: Sfc
			MODIS	AM,PM	Brown	2528	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G.R	N/A :: Sfc
			MODIS	AM,PM	Brown	2528	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G.R	N/A :: Sfc
			MODIS	AM,PM	Brown	2528	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G.R	N/A :: Sfc
			MODIS	AM,PM	Brown	2528	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G.R	N/A :: Sfc
			MODIS	AM,PM	Brown	2528	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G.R	N/A :: Sfc

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product		Accuracy		Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel			
Murakami	Sea_gfc Temperature (SST)	2518	MODIS	AM,PM	Brown, Barton	2531	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G,R	N/A :: Sfc
			MODIS	AM,PM	Brown, Barton	2532	BM	0.3-0.6K :: 0.1-0.6K	1/day, 1/wk, 1/mo	50 km :: Ocean	N/A :: Sfc
			AIRS	PM	Chedin, Fleming,	2523*	AM	0.5 - 1 K :: 0.4 - 0.5 K	2/day [d,n]	50 km :: Ocean	N/A :: Sfc
			MMR	PM	TBD	3604	AM	1 K ::	1 mo	1 dg :: Ocean	N/A :: Sfc
			MMR	PM	TBD	3603	AM			60 km :: Ocean	N/A :: Sfc
								10% ::		:: Land	N/A :: Sfc
Murakami	Snow Cover	3014	MODIS	AM,PM	Salomonson	3020	BM	<=5% :: <=5%	1/day, 1/wk	10 km :: Land	N/A :: Sfc
			MODIS	AM,PM	Salomonson	3021	BM	<=5% :: <=5%	1/day, 1/wk	1 km :: Land/R	N/A :: Sfc
			AIRS	PM	Staelin	3018*	AM		2/day [d,n]	50 km :: Land	N/A :: Sfc
			MMR	PM	TBD	3607	AM			22 km :: Land	N/A :: Sfc
			MMR	PM	TBD	3608	AM		1 mo	1 dg :: Land	N/A :: Sfc
										:: Land	N/A :: Sfc
Murakami	Soil Moisture	3066	MMR	PM	TBD	3605	BM			60 km :: Land	N/A :: Sfc
			MMR	PM	TBD	3606	BM		1 mo	1 dg :: Land	N/A :: Sfc
								1% ::			N/A :: Sfc
			AIRS	PM	Chedin, Fleming,	1588	BM	1.0 K :: 0.4 K	2/day [d,n]	15 x 50 - 50 x 50 km :: G	1, 2 km :: Atmos
			ALT	ALT	Fu	3108	BM	0.01 ::	1/(16 day)	25 km :: Ocean	N/A :: Sfc
			ALT	ALT	Fu	3112	AM	10 cm ::		7 km :: Ocean	N/A :: Sfc
Murakami	Trace Gas Conc	1374	HIRDLS	CHEM	Barnett, Gille	1047	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-30 km
			HIRDLS	CHEM	Barnett, Gille	1055	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-30 km
			HIRDLS	CHEM	Barnett, Gille	1085	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-65 km
			SAFIRE	MO	Russell	1086	BM	7% (15-55km)	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	1.5 km :: 10-65 km
			HIRDLS	CHEM	Barnett, Gille	1239	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-60 km
			ASTER	AM1	Schmugge	1791	BM	0.02 ::		90 m :: Land/R,L	N/A :: Sfc
Murakami	Vegetation Evapotrans	2745	MODIS	AM,PM	Justice, Huete et al	2749	BM	0.01 :: 0.01	1/day, 1/wk, 1/mo	10 km :: Land	N/A :: Sfc
			MODIS	AM,PM	Huete	2724*	AM	0.01 :: 0.01	1/day, 1/wk, 1/mo	1 km :: Land/R	N/A :: Sfc
			ASTER	AM1	Gillespie	2747*	AM	0.01 ::		15 m :: Land/R,L	N/A :: Sfc
			STIKSCAT	CHEM	Freilich	1746	BM			:: Ocean	N/A :: Sfc
			MMR	PM	TBD	3595	BM		1 mo	1 dg :: Ocean	N/A :: Sfc
			MMR	PM	TBD	3594	AM			39 km :: Ocean	N/A :: Sfc
Pyle	Aerosol XXX	1003	HIRDLS	CHEM	Barnett, Gille	1992	BM	5-10% :: 1-10%	2/day	:: G	:: Strat
			EOSP	AERO,AM2	Travis	2297	BM	0.2 :: 10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-30 km
			MODIS	AM,PM	Kaufman, Tere	2293	AM	0.1 :: 0.05	1/day, 1/mo	40 km :: G	Column :: Atmos
			MODIS	AM,PM	Tere, Kaufman	2294	AM	0.05 :: 0.02	1/day, 1/mo	0.5 dg :: Land	N/A :: Atmos
			MLS	MO	Waters	1030	BM	25% :: 10%	2/day	15 x 4 km :: G	N/A :: Atmos
								1x10-12	1/mo, [z, mean]	0.1 x 2.5 dg :: 82N-82S	3 km :: Strat
Pyle	BrO Conc	1027						15% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
			HIRDLS	CHEM	Barnett, Gille	1055	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-30 km
								15% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
			HIRDLS	CHEM	Barnett, Gille	1047	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-30 km
Pyle	CFC-11(CFC11) Conc	1051									
Pyle	CFC-12(CFC12) Conc	1043									

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product							Accuracy	Temporal	Horizontal	Vertical
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel	Resol	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.	
Pyle	CH3Cl Conc	1066	MLS	MO	Waters	1070	BM	15% :: 5% :: 1x10-11	2/day	2/day [d.n]	15 x 4 km :: G	3 km :: Strat	
Pyle	CH4 Conc	1077	HIRDLS	CHEM	Barnett, Gille	1085	BM	5-10% :: 1-10% :: 7% (15-55km)	2/day [d.n]	2/day [d.n]	4 x 4 dg :: G	1 km :: 7-65 km	
			SAFIRE	MO	Russell	1086	AM	14 ppb	1/(18-72 s) [?]	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	1.5 km :: 10-65 km	
			TES	CHEM	Beer	1087	AM	30 ppb	1/(16 day)	1/(16 day)	16 x 5 km :: G	4-6 km :: 0-12 km	
			TES	CHEM	Beer	1088	AM	40 ppb	1/(16 day)	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km	
			TES	CHEM	Beer	1089	AM	15% :: 5%	1/(16 day)	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km	
Pyle	CO Conc	1119	MLS	MO	Waters	1124	BM	<=5% :: 3x10-8	2/day [d.n]	2/day [d.n]	15 x 4 km :: G	2 km :: Strat	
			MLS	MO	Waters	1125	AM	<=5% :: 1x10-5	2/day [d.n]	2/day [d.n]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: TPSE, 60 km	
			TES	CHEM	Beer	1127	AM	10 ppb	1/(16 day)	1/(16 day)	0.1 x 2.5 dg :: 82N-82S	2.5 km :: 60-100 km	
			MOPTIT	AMI	Drummond	1126	AM	10% :: 10%	1/(0.4 s) [?]	1/(0.4 s) [?]	160 x 23 km :: G	2-3 km :: 13-30 km	
Pyle	ClO Conc	1104	MLS	MO	Waters	1107	BM	15% :: 5%	2/day	2/day [d.n]	22 km :: G	3-4 km :: 0-15 km	
								<=5% :: 0.3-3x10-10	2/day [d.n]	2/day [d.n]	15 x 4 km :: G	3 km :: Strat	
Pyle	Cloud Height, PSC	1404	HIRDLS	CHEM	Barnett, Gille	1408	BM	0.4 km :: 0.4 km	2/day [d.n]	2/day [d.n]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: TPSE, 70 km	
			SAGE-III	AERO,CHEM	McCormick	1437	BM	0.2 km :: 5%	1/(2 min), 30/day	1/(2 min), 30/day	15 x 50 - 50 x 50 km :: G	2 km :: Atmos	
			GLRS-A	ALT	Spinthorne et al	1405	AM	150 m ::	1/(2-16 day)	1/(2-16 day)	4 x 4 dg :: G	1 km :: 7-80 km	
Pyle	H2O Conc	1819	AIRS	PM	Chedin, Fleming,	1828	BM	10% :: 5%	2/day [d.n]	2/day [d.n]	<2 x <1 dg :: G	1 km :: Strat/Trop	
			HIRDLS	CHEM	Barnett, Gille	1837	AM	5-10% :: 1-10%	2/day [d.n]	2/day [d.n]	2-200 km :: Polar	75 m :: Strat	
			MLS	MO	Waters	1838	AM	2% :: <50km	2/day [d.n]	2/day [d.n]	15 x 4 km :: G	3 km :: Strat	
			TES	CHEM	Beer	1843	AM	0.5 ppm	1/(16 day)	1/(16 day)	15 x 50 - 50 x 50 km :: G	2 km :: Atmos	
			SAGE-III	AERO,CHEM	McCormick	1841	AM	10% :: 15%	1/(2 min), 30/day	1/(2 min), 30/day	4 x 4 dg :: G	1 km :: 7-80 km	
Pyle	H2O2 Conc	1167	SAFIRE	MO	Russell	1172	BM	20% :: 10%	2/day	2/day	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 100 km	
			MLS	MO	Waters	1171	AM	7% (30-35 km)	1/(36-72 s) [?]	1/(36-72 s) [?]	160 x 23 km :: G	2-3 km :: 13-30 km	
								1x10-10	1/day [z. mean]	1/day [z. mean]	<2 x <1 dg :: G	1 km :: 3-50 km	
Pyle	HBr Conc	1177	SAFIRE	MO	Russell	1180	BM	25% :: 10%	2/day	2/day	15 x 4 km :: G	3 km :: Strat	
								10% (25-35 km)	1/(36-72 s) [?]	1/(36-72 s) [?]	15 x 4 km :: G	3 km :: 15-40 km	
Pyle	HCl Conc	1183	MLS	MO	Waters	1188	BM	15% :: 5%	2/day	2/day	25 x 2.5 dg :: 86S-86N	3 km :: 15-40 km	
			MLS	MO	Waters	1189	BM	<=5% :: 0.1-10x10-10	2/day [d.n]	2/day [d.n]	15 x 4 km :: G	3 km :: Strat	
			SAFIRE	MO	Russell	1187	AM	<=5% :: 0.1-10x10-10	2/day [d.n]	2/day [d.n]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: TPSE, 90 km	
Pyle	HF Conc	1194	SAFIRE	MO	Russell	1197	BM	5% (25-55 km)	1/(36-72 s) [?]	1/(36-72 s) [?]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: TPSE, 80 km	
								15% :: 5%	2/day	2/day	25 x 2.5 dg :: 86S-86N	3 km :: 10-65 km	
			SAFIRE	MO	Russell	1197	BM	15% :: 5%	1/(36-72 s) [?]	1/(36-72 s) [?]	15 x 4 km :: G	3 km :: Strat	
Pyle	HNO3 Conc	1199	HIRDLS	CHEM	Barnett, Gille	1202	BM	15% (40-60 km)	2/day	2/day	25 x 2.5 dg :: 86S-86N	3 km :: 40-60 km	
			MLS	MO	Waters	1203	AM	5-10% :: 1-10%	2/day [d.n]	2/day [d.n]	15 x 4 km :: G	3 km :: Strat	
			SAFIRE	MO	Russell	1204	AM	<=5% :: 5x10-10	2/day [d.n]	2/day [d.n]	4 x 4 dg :: G	1 km :: 10-40 km	
			TES	CHEM	Beer	1205	AM	7% (15-40 km)	1/(18-72 s) [?]	1/(18-72 s) [?]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: TPSE, 46 km	
			TES	CHEM	Beer	1206	AM	3 ppt	1/(16 day)	1/(16 day)	25 x 1.5 dg :: 86S-86N	1.5 km :: 10-45 km	
Pyle	HNOx Conc	1210	HIRDLS	CHEM	Barnett, Gille	1202	BM	25% :: 10%	2/day	2/day	160 x 23 km :: G	2-3 km :: 4-12 km	
								5-10% :: 1-10%	2/day [d.n]	2/day [d.n]	160 x 23 km :: G	2-3 km :: 13-30 km	
Pyle	HO2 Conc	1213	MLS	MO	Waters	1216	BM	25% :: 10%	2/day	2/day	15 x 4 km :: G	3 km :: Strat	
			SAFIRE	MO	Russell	1217	AM	7% (30-60 km)	1/(36-72 s) [?]	1/(36-72 s) [?]	4 x 4 dg :: G	1 km :: 10-40 km	
								3-20x10-10	2/day [d.n]	2/day [d.n]	15 x 4 km :: G	3 km :: Strat	
								25 x 2.5 dg :: 82N-82S	1/(36-72 s) [?]	1/(36-72 s) [?]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: 30-80 km	
								7% (30-60 km)	1/(36-72 s) [?]	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N	3 km :: 20-75 km	

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product				Temporal Resolution			Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel	Resolution	Horizontal Resol :: Cover.	Horizontal Resol :: Cover.	Vertical Resol :: Cover.	Vertical Resol :: Cover.
Pyle	HOC1 Conc	1219	MLS	MO	Walters	1222	BM	25% :: 10%	2/day	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat	3 km :: Strat
			SAFIRE	MO	Russell	1223	AM	7% (35-40 km) :: 3x10-11	1/day	0.1 x 2.5 dg :: 82N-82S	0.1 x 2.5 dg :: 82N-82S	2.5 km :: 20-45 km	2.5 km :: 20-45 km
Pyle	Irradiance, Solar	2273	SOLSTICE	MO	Rotman	2278	BM	<5% :: <1%	2/day	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat	3 km :: Strat
			SOLSTICE	MO	Rotman	2277	BM	<5% :: <1%	1/hr	N/A :: N/A	N/A :: N/A	N/A :: NA	N/A :: NA
Pyle	N2O Conc	1231	MLS	MO	Walters	1240	BM	<5% :: 1-10x10-8	2/day [d,n]	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat	3 km :: Strat
			HIRDLS	CHEM	Barnett, Gille	1239	BM	5-10% :: 1-10%	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 65 km	2.5 km [1.2] :: TPSE, 65 km
Pyle	N2O3 Conc	1251	HIRDLS	CHEM	Barnett, Gille	1254	BM	20% :: 10%	2/day	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat	3 km :: Strat
			SAFIRE	MO	Russell	1255	AM	5-10% (20-40 km) :: 10%	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	25 x 1.5 dg :: 86S-86N	1 km :: 15-45 km	1 km :: 15-45 km
Pyle	NO Conc	1263	MLS	MO	Walters	1266	BM	15% :: 5%	2/day	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat	3 km :: Strat
			TES	CHEM	Beer	1268	AM	15% :: 5%	1/(16 day)	160 x 23 km :: G	160 x 23 km :: G	2.5 km [1.2] :: 30-120 km	2.5 km [1.2] :: 30-120 km
Pyle	NO2 Conc	1270	HIRDLS	CHEM	Barnett, Gille	1273	BM	5-10% :: 3-10%	2/day [d,n]	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat	3 km :: Strat
			MLS	MO	Walters	1274	AM	5-10% :: 3-10%	2/day [d,n]	4 x 4 dg :: G	4 x 4 dg :: G	1 km :: 10-55 km	1 km :: 10-55 km
Pyle	NO Conc	1263	SAFIRE	MO	Russell	1275	AM	5% (20-55 km) :: 10%	1/(18-72 s) [?]	0.1 x 2.5 dg :: 82N-82S	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: 30-60 km	2.5 km [1.2] :: 30-60 km
			SAGE-III	AERO,CHEM	McCormick	1276	AM	10% :: 15%	1/(2 min), 30/day	25 x 1.5 dg :: 86S-86N	25 x 1.5 dg :: 86S-86N	1.5 km :: 15-60 km	1.5 km :: 15-60 km
Pyle	NO3 Conc	1280	SAGE-III	AERO,CHEM	McCormick	1277	AM	10% :: 15%	1/(2 min), 30/day	<2 x <1 dg :: Polar	<2 x <1 dg :: Polar	1 km :: 10-50 km	1 km :: 10-50 km
			TES	CHEM	Beer	1278	AM	500 ppt	1/(16 day)	160 x 23 km :: G	160 x 23 km :: G	2.3 km :: 4-12 km	2.3 km :: 4-12 km
Pyle	O(3P) Conc	1295	SAGE-III	AERO,CHEM	McCormick	1282	BM	25% :: 10%	1/day [n]	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat	3 km :: Strat
			SAFIRE	MO	Russell	1298	BM	10% :: 10%	1/(2 min), 30/day	<2 x <1 dg :: G	<2 x <1 dg :: G	1 km :: 20-55 km	1 km :: 20-55 km
Pyle	O3 Conc	1311	HIRDLS	CHEM	Barnett, Gille	1318	BM	15% (110-180 km) :: 5%	1/(36-72 s) [?]	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat	3 km :: Strat
			MLS	MO	Walters	1319	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	4 x 4 dg :: G	1 km :: 7-80 km	1 km :: 7-80 km
Pyle	OCIO Conc	1350	SAFIRE	MO	Russell	1320	AM	<= 3% :: 1% (<50km)	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 110 km	2.5 km [1.2] :: TPSE, 110 km
			SAGE-III	AERO,CHEM	McCormick	1321	AM	6% :: 5%	1/(2 min), 30/day	25 x 2.5 dg :: 86S-86N	25 x 2.5 dg :: 86S-86N	1.5 km :: 10-100 km	1.5 km :: 10-100 km
Pyle	OH Conc	1211	TES	CHEM	Beer	1323	AM	20 ppt	1/(16 day)	<2 x <1 dg :: Polar	<2 x <1 dg :: Polar	1 km :: 6-85 km	1 km :: 6-85 km
			TES	CHEM	Beer	1324	AM	3 ppt	1/(16 day)	160 x 23 km :: G	160 x 23 km :: G	2.3 km :: 13-30 km	2.3 km :: 13-30 km
Pyle	Temperature Profile	1581	SAGE-III	AERO,CHEM	McCormick	1353	BM	25% :: 10%	2/day	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat	3 km :: Strat
			MLS	MO	Walters	1352	AM	20% :: 20%	1/(2 min), 30/day	<2 x <1 dg :: G	<2 x <1 dg :: G	2 km :: 15-25 km	2 km :: 15-25 km
Pyle	Wind Speed	1714	SAFIRE	MO	Russell	1360	BM	20% :: 10%	1/(36-72 s) [?]	15 x 4 km :: G	15 x 4 km :: G	2 km :: Strat	2 km :: Strat
			AIRS	PM	Chedin, Fleming	1588	BM	2 K :: 0.5 K	2/day	25 x 2.5 dg :: 86S-86N	25 x 2.5 dg :: 86S-86N	3 km :: 20-90 km	3 km :: 20-90 km
Pyle	Wind Speed	1714	TES	CHEM	Beer	1614	AM	1.0 K :: 0.4 K	2/day [d,n]	15 x 50 - 50 x 50 km :: G	15 x 50 - 50 x 50 km :: G	1 km, 4-6 km :: 0-12 km	1 km, 4-6 km :: 0-12 km
			SAGE-III	AERO,CHEM	McCormick	1611	AM	2 K :: 2K	1/(16 day)	160 x 23 km :: G	160 x 23 km :: G	2.3 km :: 13-30 km	2.3 km :: 13-30 km
Pyle	Wind Speed	1714	MLS	MO	Walters	1609	AM	2 K :: 2K	1/(2 min), 30/day	<2 x <1 dg :: G	<2 x <1 dg :: G	1 km :: 6-55 km	1 km :: 6-55 km
			SAFIRE	MO	Russell	1610	AM	<0.5K (16-65 km) :: 5 m/s :: 5 m/s	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 120 km	2.5 km [1.2] :: TPSE, 120 km
Pyle	Wind Speed	1714	MLS	MO	Walters	1734	BM	5 m/s :: 5 m/s	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	25 x 1.5 dg :: 86S-86N	1.5 km :: 10-110 km	1.5 km :: 10-110 km
			MLS	MO	Walters	1734	BM	10m/s	2/day [d,n]	15 x 4 km :: G	15 x 4 km :: G	2 km :: Strat	2 km :: Strat

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product			Accuracy		Temporal Resolution	Horizontal		Vertical
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match		Resol :: Cover.	Resol :: Cover.	
Richy, Batista	Lake Water Attenuation Coef	3203	MODIS	AM,PM	Gordon, Clark	3200	AM	1/wk	1 km :: Ocean/Lake/L	1 km :: Ocean/Lake/L	N/A :: TOO
Richy, Batista	Lake Water Chlorophyll Conc	2654	HIRIS	AM2	Carder, Melick	3314	AM-	1/wk	1 km :: Ocean/Lake/L	1 km :: Ocean/Lake/L	N/A :: TOO
Richy, Batista	Land_gfc Temperature	2476	MODIS	AM,PM	Wan	2484	BM	1/day	1 km :: Land/R	1 km :: Land/R	N/A :: Sfc
			MODIS	AM,PM	Wan	2485	BM	1/day, 1/wk	1 km :: Land/R	1 km :: Land/R	N/A :: Sfc
			AIRS	PM	Chedin, Fleming	2481	AM	1/day, 1/wk	10 km :: Land	10 km :: Land	N/A :: Sfc
			ASTER	AM1	Kahle, Becker, C	2483	AM	2/day [d,n]	50 km :: Land	50 km :: Land	N/A :: Sfc
Richy, Batista	Precipitable Water	1810						1/(2-16 day)	90 m :: Land	90 m :: Land	N/A :: Sfc
			AIRS	PM	Chedin, Fleming	1869	BM	1/day	5% :: 5%	5% :: 5%	5% :: 5%
			MODIS	AM,PM	Kaufman, Tere	3321	AM	2/day [d,n]	5% :: 3%	5% :: 3%	5% :: 3%
Richy, Batista	Precipitable Water	1863						1 day, mo	1 km :: Land	1 km :: Land	1 km :: Land
			MODIS	AM,PM	Kaufman, Tere	3321	BM	1/wk	1 km :: Land	1 km :: Land	1 km :: Land
			HIRIS	AM2	Goetz	1872	AM	1 day, mo	1 km :: Land	1 km :: Land	1 km :: Land
Richy, Batista	Radiative Flux, Broadband	2141						1/(1-3 min), 1/(2-16 day)	30 m :: L	30 m :: L	30 m :: L
			CERES	TRM,AM,PM	Barkstrom	2223	BM	2/day	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G
			CERES	TRM,AM,PM	Barkstrom	2223	BM	1/(6 hr)	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G
			CERES	TRM,AM,PM	Barkstrom	2248	BM	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G
			CERES	TRM,AM,PM	Barkstrom	2249	BM	1/(6 hr)	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G
Richy, Batista	Soil Chemistry	2810						1/week	1 km :: Land/R	1 km :: Land/R	1 km :: Land/R
			ASTER	AM1	Kahle, Gillespie	2803*	BM	1/week	90 m :: Land/R	90 m :: Land/R	90 m :: Land/R
Richy, Batista	Soil Moisture	2958						50 maps/mission	1 km :: Land/R	1 km :: Land/R	1 km :: Land/R
			MIMR	PM	TBD	3605	BM	1/mo	60 km :: Land	60 km :: Land	60 km :: Land
Richy, Batista	Vegetation Biomass	2627						1/week	1 km :: Land/R	1 km :: Land/R	1 km :: Land/R
			HIRIS	AM2	Ustin, Westman	2620	BM	1/(2-16 day)	30 m :: Land/L	30 m :: Land/L	30 m :: Land/L
			HIRIS	AM2	Ustin, Westman	2614	BM	1/(2-16 day)	30 m :: Land/L	30 m :: Land/L	30 m :: Land/L
Richy, Batista	Vegetation Physiography	2693						1/mo	1 km :: Land/R	1 km :: Land/R	1 km :: Land/R
			HIRIS	AM2	Ustin	2656	AM-	1/(2-16 day)	30 m :: Land/L	30 m :: Land/L	30 m :: Land/L
			HIRIS	AM2	Ustin	2657	AM-	1/(2-16 day)	30 m :: Land/L	30 m :: Land/L	30 m :: Land/L
Richy, Batista	Vegetation Structure	2726						1/week	1 km :: Land/R	1 km :: Land/R	1 km :: Land/R
			HIRIS	AM2	Ustin	2656	AM	1/(2-16 day)	30 m :: Land/L	30 m :: Land/L	30 m :: Land/L
			HIRIS	AM2	Ustin, Westman	2741	AM	1/(2-16 day)	30 m :: Land/L	30 m :: Land/L	30 m :: Land/L
Rothrock	Albedo, Sea_Ice	2012						1/(3 day)	25 km :: Polar	25 km :: Polar	25 km :: Polar
			EOSP	AERO,AM2	Travis	3644	AM	2 day [d]	10 km :: G	10 km :: G	10 km :: G
Rothrock	Cloud Cover	2076						1/day	100 km :: Polar	100 km :: Polar	100 km :: Polar
			CERES	TRM,AM,PM	Barkstrom	2088	BM	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G
			MODIS	AM,PM	King	2082	BM	1/day, 1/mo	1 dg :: G	1 dg :: G	1 dg :: G
			AIRS	PM	Chahine, Chedin,	2062	AM	2/day [d,n]	15 x 15 - 50 x 50 km :: G	15 x 15 - 50 x 50 km :: G	15 x 15 - 50 x 50 km :: G
			CERES	TRM,AM,PM	Barkstrom	2086	AM	6/day [d,n]	25 km :: G	25 km :: G	25 km :: G
Rothrock	Cloud Height, Top	1419						1/day	100 km :: Polar	100 km :: Polar	100 km :: Polar
			CERES	TRM,AM,PM	Barkstrom	1430	BM	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G
			CERES	TRM,AM,PM	Barkstrom	1431	BM	1/(6 hr)	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G
			AIRS	PM	Chahine, Chedin,	1423*	AM	2/day [d,n]	15 x 15 - 50 x 50 km :: G	15 x 15 - 50 x 50 km :: G	15 x 15 - 50 x 50 km :: G
			MISR	AM	Diner	1432*	AM	1/(5-16 day) [d]	5 km :: G	5 km :: G	5 km :: G
			MODIS	AM,PM	Menzel	1529	AM	1/day, 1/mo	1 dg :: G	1 dg :: G	1 dg :: G
			EOSP	AERO,AM2	Travis	1530	AM	1/day [d]	40 km :: G	40 km :: G	40 km :: G

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product		Accuracy		Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	
Rohrrock	Cloud Transmissivity	2344	EOSP	AERO/AM2	Travis	2313	BM	100 km :: Polar
			MODIS	AM/PM	King	2312	BM	40 km :: G
			CERES	TRM/AM/PM	Barkstrom	2317	AM	1 dg :: G
			CERES	TRM/AM/PM	Barkstrom	2318	AM	1.25 dg :: G
			CERES	TRM/AM/PM	Barkstrom	2322	AM	1.25 dg :: G
			CERES	TRM/AM/PM	Barkstrom	2323	AM	1.25 dg :: G
			CERES	TRM/AM/PM	Barkstrom	2321	AM	1.25 dg :: G
			CERES	TRM/AM/PM	Barkstrom	2316	AM	25 km :: G
			CERES	TRM/AM/PM	Barkstrom	2316	AM	25 km :: G
			CERES	TRM/AM/PM	Barkstrom	2316	AM	25 km :: G
Rohrrock	Humidity, Near_sfc	1820	AIRS	PM	Chedin, Fleming	1828	BM	100 km :: Polar
Rohrrock	Pigment Conc, Phytoplankton	2590	MISR	AM	Diner	2589	BM	15 x 50 - 50 x 50 km :: G
Rohrrock	Sea_Ice Conc, First-year	3165	MODIS	AM/PM	Gordon, Clark	2592	AM	10 km :: Polar
Rohrrock	Sea_Ice Conc, GCM	3178	MODIS	AM/PM	Gordon, Clark	2591	AM	1.92 km :: Ocean/G,R
Rohrrock	Sea_Ice Conc, Multi-year	3175	MODIS	AM/PM	Gordon, Clark	2592	AM	1 km :: Ocean/R,L
Rohrrock	Sea_Ice Cover	3188	MODIS	AM/PM	Gordon, Clark	2591	AM	20 km :: Ocean/G,R
Rohrrock	Sea_Ice Edge	3189	MODIS	AM/PM	Gordon, Clark	2591	AM	25 km :: Ocean/Cryo
Rohrrock	Sea_Ice Motion	3103	MODIS	AM/PM	Gordon, Clark	2591	AM	22 km :: Ocean/Cryo
Rohrrock	Sea_Ice Temperature (SST)	2519	MODIS	AM/PM	Gordon, Clark	2591	AM	25 km :: Ocean/Cryo
Rohrrock	Temperature, Near_sfc	1627	MODIS	AM/PM	Gordon, Clark	2591	AM	10 km :: Ocean/Cryo
Rohrrock	Wind Velocity, Sea_sfc	1669	MODIS	AM/PM	Gordon, Clark	2591	AM	22 km :: Ocean/Cryo
Rohrrock	Wind Velocity, Sea_sfc	1670	MODIS	AM/PM	Gordon, Clark	2591	AM	25 km :: Ocean/Cryo

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product					Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel			
Rothrock	Wind Velocity, Sea_sfc	1670	STIKSCAT	CHIM	Freilich	1679	AM	7% :: 16 deg	1/2 day	1 dg :: Ocean	N/A :: Near_Sfc
	PAR, Intercepted, (IPAR)	2263	MODIS	AM,PM	Terre	2268*	BM	10% :: 1%	1/day	500 m :: 6 sites/L	N/A :: Sfc
Schmehl	PAR, Intercepted, (IPAR)	2264						200 :: 5 - 20%	1/day, 1/wk	1 km :: G,R	N/A :: Atmos
Schmehl	PAR, Intercepted, (IPAR)	2265	HIRIS	AM2	Ustin, Westman	2030	BM-	10% :: 1%	1/wk	30 m :: 6 sites/L	N/A :: Sfc
Schmehl	PAR, Intercepted, (IPAR)	2265						25% :: 10%	1/2-16 day	30 m :: Land/L	N/A :: Sfc
Schmehl	Temperature, Near_sfc	1632	MODIS	AM,PM	Terre	2268*	BM	10% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
								200 :: 5 - 20%	1/day, 1/wk	1 km :: G,R	N/A :: Atmos
								10% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
			AIRS	PM	Chedin, Fleming,	1588	BM	1.0 K :: 0.4 K	2day [dn]	15 x 50 - 50 x 50 km :: G	1, 2 km :: Atmos
Schmehl	Temperature, Near_sfc	1633	MODIS	AM,PM	Wan	2484	AM-	1 C :: 1 C	1/day, 1/wk	1 km :: Land/R	N/A :: Sfc
								10% :: 1%	1/day, 1/wk	30 m :: 6 sites/L	N/A :: Sfc
			ASTER	AM1	Kahle, Becker, Ch	2483	BM-	1-6 K :: 0.3 K	1/2-16 day	90 m :: Land	N/A :: Sfc
Schmehl	Vegetation Chlorophyll Conc	2651						10% :: 1%	1/wk	30 m :: 6 sites/L	N/A :: Sfc
			HIRIS	AM2	Ustin, Westman	2653	BM	25% :: 10%	1/2-16 day	30 m :: Land/L	N/A :: Sfc
Schmehl	Vegetation Chlorophyll Conc	2652						10% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
			HIRIS	AM2	Ustin, Westman	2653	BM	25% :: 10%	1/2-16 day	30 m :: Land/L	N/A :: Sfc
Schmehl	Vegetation Evapotrans	1790						20% :: 5%	1/wk	30 m :: 6 sites/L	N/A :: Sfc
			ASTER	AM1	Schmugge	1791	BM	1 mm/day :: 0.5 mm/day		90 m :: Land/R,L	N/A :: Sfc
Schmehl	Vegetation Index, Leaf Area, (LAI)	2678						10% :: 1%	1/wk, 1mo	30 m :: 6 sites/L	N/A :: Sfc
			MODIS	AM,PM	Running	2680*	BM	0.1-0.25 :: 5-20%	1/day, 1/wk	pixel_size :: Land/G,R,L	N/A :: N/A
Schmehl	Vegetation Lignin Conc	2685						0.1-0.25 :: 5-20%	1/day, 1/wk	30 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Ustin et al	2746	AM	20% :: 10%	1/2-16 day	15 m :: Land/R,L	N/A :: Sfc
Schmehl	Vegetation Lignin Conc	2686						10% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
			HIRIS	AM2	Gillespie	2747*	AM	10% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
Schmehl	Vegetation Index, Leaf Area, (LAI)	2679						10% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
			MODIS	AM,PM	Running	2680*	BM	0.1-0.25 :: 5-20%	1/day, 1/wk	pixel_size :: Land/G,R,L	N/A :: N/A
Schmehl	Vegetation Lignin Conc	2685						20% :: 1%	1/day, 1/wk	30 m :: 6 sites/L	N/A :: Sfc
			HIRIS	AM2	Westman, Aber	2687	BM	40% :: 20%	1/2-16 day	30 m :: Land/L	N/A :: Sfc
Schmehl	Vegetation Lignin Conc	2686						20% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
			HIRIS	AM2	Westman, Aber	2687	BM	40% :: 20%	1/2-16 day	30 m :: Land/L	N/A :: Sfc
Schmehl	Vegetation Production, Net Primary, (NPP)	2698						20% :: 5%	1/yr	500 m :: 6 sites/L	N/A :: Sfc
			MODIS	AM,PM	Running	2703*	BM	100 :: 5-30%	1/wk, 1mo, 1/yr	1 km :: Land/G,R	N/A :: N/A
Schmehl	Vegetation Structure	2641						5%	1/yr	30 m :: 6 sites/L	N/A :: Sfc
			HIRIS	AM2	Ustin	2657	AM	40% :: 20%	1/2-16 day	30 m :: Land/L	N/A :: Sfc
Schmehl	Vegetation Structure	2642						40% :: 20%	1/2-16 day	30 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Ustin	2656	AM	40% :: 20%	1/2-16 day	30 m :: Land/L	N/A :: Sfc
								5%	1/yr	500 m :: 6 sites/L	N/A :: Sfc
Schmehl	Vegetation Structure	2643						40% :: 20%	1/2-16 day	30 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Ustin	2657	AM	40% :: 20%	1/2-16 day	30 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Ustin	2656	AM	40% :: 20%	1/2-16 day	30 m :: Land/L	N/A :: Sfc
								5%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
Schmehl	Vegetation Structure	2643						40% :: 20%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
			HIRIS	AM2	Ustin	2657	AM	40% :: 20%	1/2-16 day	30 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Ustin	2656	AM	40% :: 20%	1/2-16 day	30 m :: Land/L	N/A :: Sfc
Schoeberl	Aerosol Conc	1010						10% :: 5%	1/day	200 km :: G	1 km :: Strat
			SAGE-III	AERO,CHIM	McCormick	1012	AM-	5% :: 5%	1/2 min, 30/day	<2 x <1 dg :: G	1 km :: 0-40 km
Schoeberl	Aerosol Size-distribution	1021	HIRDLS	CHIM	Barnett, Gille	1992	AM-	5-10% :: 1-10%	2day [dn]	4 x 4 dg :: G	1 km :: 7-30 km
								10% :: 5%	1/day	200 km :: G	1 km :: Strat
			MODIS	AM,PM	Terre, Kaufman	1022	BM	10-30% :: 10%	1/day, 1mo	0.5 dg :: G,R	N/A :: Atmos
			MISR	AM	Diner	1993	AM	15% :: 10%	1/5-16 day [d]	15.4 km :: G	Column :: Atmos
			MISR	AM	Diner	3678	AM	15% :: 10%	9.16 day, mo; seas; yr	15.4 km ? :: G	Column :: Atmos

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product					Accuracy			Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel								
Schoeberl	BrO Conc	1028	MLS	MO	Waters	1030	BM	20% :: 1			1/wk		8 x 10 dg :: G		2 km :: Strat	
Schoeberl	CFC-11(CFCU) Conc	1052	HIRDLS	CHEM	Barnett, Gille	1055	BM	15% :: 10			1/day		2 x 3 dg :: G		1.5 km :: Strat	
Schoeberl	CFC-12(CFC12) Conc	1044	HIRDLS	CHEM	Barnett, Gille	1047	BM	5-10% :: 1-10%			2/day [d.n]		4 x 4 dg :: G		1 km :: 7-30 km	
Schoeberl	CH3Cl Conc	1067	HIRDLS	CHEM	Barnett, Gille	1070	BM	15% :: 10			1/day		2 x 3 dg :: G		1.5 km :: Strat	
Schoeberl	CH4 Conc	1078	MLS	MO	Waters	1085	BM	5-10% :: 1-10%			2/day [d.n]		8 x 10 dg :: G		1 km :: 7-30 km	
Schoeberl	CO Conc	1120	SAFIRE	CHEM	Russell	1086	AM	7% (15-55km)			1/(18-72 s) [?]		25 x 1.5 dg :: 86S-86N		1.5 km :: 10-65 km	
Schoeberl	CO Conc	1121	TES	CHEM	Beer	1088	AM	30 ppb			1/(16 day)		160 x 23 km :: G		2-3 km :: 13-30 km	
Schoeberl	CO Conc	1105	SAFIRE	CHEM	Beer	1126	BM	15% :: 5			1/day		2 x 3 dg :: G		2 km :: Trop	
Schoeberl	CO Conc	1856	SAFIRE	CHEM	Beer	1128	AM	10% :: 10%			1/(0.4 s) [?]		22 km :: G		3-4 km :: 0-15 km	
Schoeberl	CO Conc	1821	SAFIRE	CHEM	Beer	1129	AM	15 ppb			1/(16 day)		160 x 23 km :: G		2-3 km :: 4-12 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	3 ppb			1/(16 day)		16 x 5 km :: G		4-6 km :: 0-12 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	15% :: 5			1/day		8 x 10 dg :: G		3 km :: Mid-atmos	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	<=5% :: 3x10-8			2/day [d.n]		0.1 x 2.5 dg :: 82N-82S		2.5 km :: TPSE, 60 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	<=5% :: 1x10-5			2/day [d.n]		0.1 x 2.5 dg :: 82N-82S		2.5 km :: 60-100 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	10 ppb			1/(16 day)		160 x 23 km :: G		2-3 km :: 13-30 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	10% :: 0.02			1/day		8 x 10 dg :: G		3 km :: Strat	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	<=5% :: 0.3-3x10-10			2/day [d.n]		0.1 x 2.5 dg :: 82N-82S		2.5 km :: TPSE, 70 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	10% :: 10%			1/day		8 x 10 dg :: G		3 km :: Strat	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	7% (20-50 km)			1/(36-72 s) [?]		25 x 2.5 dg :: 86S-86N		3 km :: 10-60 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	10% :: 5% 0.05s			1/day		2 x 3 dg :: G		1.5 km :: 0-Strat	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	10% :: 5%			2/day [d.n]		15 x 50 - 50 x 50 km :: G		2 km :: Atmos	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	5-10% :: 1-10%			2/day [d.n]		4 x 4 dg :: G		1 km :: 7-80 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	2% <50km			2/day [d.n]		0.1 x 2.5 dg :: 82N-82S		2.5 km [1.2] :: TPSE, 100 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	2% <50km			2/day [d.n]		0.1 x 2.5 dg :: 82N-82S		3 km :: 10-100 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	5% (20-80 km)			1/(36-72 s) [?]		25 x 2.5 dg :: 86S-86N		3 km :: 10-100 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	10% :: 15%			1/(2 min), 30/day		<2 x <1 dg :: G		1 km :: 3-50 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	0.5 ppm			1/(16 day)		160 x 23 km :: G		2-3 km :: 13-30 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	50 ppm			1/(16 day)		16 x 5 km :: G		4-6 km :: 0-12 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	10% :: 0.05			1/day		4 x 5 dg :: G		2.5 km :: Meso	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	5-10% :: 1-10%			2/day [d.n]		4 x 4 dg :: G		1 km :: 7-80 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	2% <50km			2/day [d.n]		0.1 x 2.5 dg :: 82N-82S		2.5 km [1.2] :: TPSE, 100 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	5% (20-80 km)			1/(36-72 s) [?]		25 x 2.5 dg :: 86S-86N		3 km :: 10-100 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	20% :: 1t, 0.05s			1/wk		8 x 10 dg :: G		2 km :: Strat	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	1x10-10			1/day [z. mean]		0.1 x 2.5 dg :: 82N-82S		2.5 km :: 30-40 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	7% (30-35 km)			1/(36-72 s) [?]		25 x 2.5 dg :: 86S-86N		3 km :: 20-50 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	20% :: 1			1/wk		8 x 10 dg :: G		3 km :: Strat	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	10% (25-35 km)			1/(36-72 s) [?]		25 x 2.5 dg :: 86S-86N		3 km :: 15-40 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	20% :: 0.01			1/wk		8 x 10 dg :: G		3 km :: Strat	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	<=5% :: 4x10-11			2/day [d.n]		0.1 x 2.5 dg :: 82N-82S		2.5 km :: 20-65 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	35% (25-30 km)			1/(36-72 s) [?]		25 x 2.5 dg :: 86S-86N		3 km :: 25-35 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	15% :: 0.1			1/day		4 x 5 dg :: G		2 km :: Strat	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	<=5% :: 0.1-10x10-10			2/day [d.n]		0.1 x 2.5 dg :: 82N-82S		2.5 km :: TPSE, 90 km	
Schoeberl	CO Conc	1822	SAFIRE	CHEM	Beer	1127	AM	<=5% :: 0.1-10x10-10			2/day [d.n]		0.1 x 2.5 dg :: 82N-82S		2.5 km :: TPSE, 80 km	

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product				Accuracy			Temporal Resolution		Horizontal Resol. : Cover.		Vertical Resol. : Cover.	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs : Rel							
Schoeberl	HCl Conc	1184	SAFIRE	MO	Russell	1187	AM	5% (25-55 km)		1/(36-72 s) [?]		25 x 2.5-5 dg :: 86S-86N		3 km :: 10-65 km	
Schoeberl	HF Conc	1195	SAFIRE	MO	Russell	1197	BM	15% :: 0.05		1/day		4 x 5 dg :: G		2 km :: Stral	
Schoeberl	HNO3 Conc	1200						15% (40-60 km)		1/(36-72 s) [?]		25 x 2.5-5 dg :: 86S-86N		3 km :: 40-60 km	
								15% :: 0.1		1/day		2 x 3 dg :: G		2 km :: Stral	
			HIRDLS	CHEM	Barnett, Gille	1202	BM	5-10% :: 1-10%		2/day [d,n]		4 x 4 dg :: G		1 km :: 10-40 km	
			MLS	MO	Waters	1203	AM	<5% :: 5x10-10		2/day [d,n]		0.1 x 2.5 dg :: 82N-82S		2.5 km :: TPSE, 46 km	
			SAFIRE	MO	Russell	1204	AM	7% (15-40 km)		1/(18-72 s) [?]		25 x 1-5 dg :: 86S-86N		1.5 km :: 10-45 km	
			TES	CHEM	Beer	1206	AM	3 ppt		1/(16 day)		160 x 23 km :: G		2-3 km :: 13-30 km	
Schoeberl	H2O Conc	1214						15% :: 0.02		1/day [d]		6 x 8 dg :: G		2 km :: Stral	
			MLS	MO	Waters	1216	BM	3-20x10-10		2/day [d,n]		0.1 x 2.5 dg :: 82N-82S		2.5 km :: 30-80 km	
			SAFIRE	MO	Russell	1217	AM	7% (30-60 km)		1/(36-72 s) [?]		25 x 2.5-5 dg :: 86S-86N		3 km :: 20-75 km	
Schoeberl	HOCI Conc	1220						20% :: 0.02		1/day		8 x 10 dg :: G		3 km :: Stral	
			MLS	MO	Waters	1222	BM	3x10-11		1/(36-72 s) [?]		0.1 x 2.5 dg :: 82N-82S		2.5 km :: 25-45 km	
			SAFIRE	MO	Russell	1223	AM	7% (35-40 km)		1/day		25 x 2.5-5 dg :: 86S-86N		3 km :: 20-45 km	
Schoeberl	N2O Conc	1232						15% :: 10		1/day		2 x 3 dg :: G		2 km :: Stral	
			HIRDLS	CHEM	Barnett, Gille	1239	BM	5-10% :: 1-10%		2/day [d,n]		4 x 4 dg :: G		1 km :: 7-60 km	
			MLS	MO	Waters	1240	AM	<5% :: 1-10x10-8		2/day [d,n]		0.1 x 2.5 dg :: 82N-82S		2.5 km [1.2] :: TPSE, 65 km	
			SAFIRE	MO	Russell	1241	AM	15% (20-35 km)		1/(18-72 s) [?]		25 x 1-5 dg :: 86S-86N		1.5 km :: 20-40 km	
			TES	CHEM	Beer	1243	AM	10 ppt		1/(16 day)		160 x 23 km :: G		2-3 km :: 13-30 km	
Schoeberl	N2O5 Conc	1252						15% :: 20%		1/day		8 x 10 dg :: G		3 km :: Stral	
			HIRDLS	CHEM	Barnett, Gille	1254	BM	5-10% :: 1-10%		2/day [d,n]		4 x 4 dg :: G		1 km :: 15-45 km	
			SAFIRE	MO	Russell	1255	AM	10% (20-40 km)		1/(18-72 s) [?]		25 x 1-5 dg :: 86S-86N		1.5-3 km :: 10-45 km	
Schoeberl	NO Conc	1264						15% :: 2.5x10m		1/day [d]		4 x 5 dg :: G		2 km :: Mid-atmos	
			MLS	MO	Waters	1266	BM	1-10x10-7		2/day [d,n]		0.1 x 2.5 dg :: 82N-82S		2.5 km [1.2] :: 30-120 km	
			TES	CHEM	Beer	1268	AM	25 ppt		1/(16 day)		160 x 23 km :: G		2-3 km :: 13-30 km	
Schoeberl	NO2 Conc	1271						10% ::		1/day		4 x 5 dg :: G		2 km :: Mid-atmos	
			HIRDLS	CHEM	Barnett, Gille	1273	BM	5-10% :: 3-10%		2/day [d,n]		4 x 4 dg :: G		1 km :: 10-55 km	
			SAGE-III	AERO,CHEM	McCormick	1277	BM	10% :: 15%		1/(2 min), 30/day		<2 x <1 dg :: G		1 km :: 20-50 km	
			SAGE-III	AERO,CHEM	McCormick	1276	AM	10% :: 10%		1/(2 min), 30/day		<2 x <1 dg :: Polar		1 km :: 10-50 km	
			MLS	MO	Waters	1274	AM	1-8x10-8		2/day [d,n]		0.1 x 2.5 dg :: 82N-82S		2.5 km [1.2] :: 30-60 km	
			SAFIRE	MO	Russell	1275	AM	5% (20-55 km)		1/(18-72 s) [?]		25 x 1-5 dg :: 86S-86N		1.5 km :: 15-60 km	
			TES	CHEM	Beer	1278	AM	500 ppt		1/(16 day)		160 x 23 km :: G		2-3 km :: 4-12 km	
Schoeberl	O(3P) Conc	1296						15% :: 10%		1/day [d]		8 x 10 dg :: G		3 km :: Stral	
			SAFIRE	MO	Russell	1298	BM	15% (110-180 km)		1/(36-72 s) [?]		25 x 2.5-5 dg :: 86S-86N		3 km :: 90-180 km	
Schoeberl	O3 Conc	1312						10% :: 10%		1/day		4 x 5 dg :: G		2.5 km :: Trop	
			HIRDLS	CHEM	Barnett, Gille	1318	BM	5-10% :: 1-10%		2/day [d,n]		4 x 4 dg :: G		1 km :: 7-80 km	
			SAGE-III	AERO,CHEM	McCormick	1321	AM	6% :: 5%		1/(2 min), 30/day		<2 x <1 dg :: Polar		1 km :: 6-85 km	
			SAFIRE	MO	Russell	1320	AM	5% (10-70 km)		1/(18-72 s) [?]		25 x 2.5-5 dg :: 86S-86N		1.5-3 km :: 10-100 km	
			TES	CHEM	Beer	1324	AM	3 ppb		1/(16 day)		160 x 23 km :: G		2-3 km :: 4-12 km	
			TES	CHEM	Beer	1325	AM	13 ppb		1/(16 day)		16 x 5 km :: G		4-6 km :: 0-12 km	
Schoeberl	O3 Conc	1313						10% :: 5%		1/day		2 x 3 dg :: G		1.5 km :: Mid-atmos	
			HIRDLS	CHEM	Barnett, Gille	1318	BM	5-10% :: 1-10%		2/day [d,n]		4 x 4 dg :: G		1 km :: 7-80 km	
			MLS	MO	Waters	1319	BM	<3% :: 1% (<50km)		2/day [d,n]		0.1 x 2.5 dg :: 82N-82S		2.5 km [1.2] :: TPSE, 110 km	
			SAFIRE	MO	Russell	1320	AM	5% (10-70 km)		1/(18-72 s) [?]		25 x 2.5-5 dg :: 86S-86N		1.5-3 km :: 10-100 km	
			SAGE-III	AERO,CHEM	McCormick	1321	AM	6% :: 5%		1/(2 min), 30/day		<2 x <1 dg :: Polar		1 km :: 6-85 km	
			TES	CHEM	Beer	1323	AM	20 ppb		1/(16 day)		160 x 23 km :: G		2-3 km :: 13-30 km	
			SAFIRE	MO	Russell	1327	AM	15% (20-30 km)		1/(36-72 s) [?]		25 x 2.5-5 dg :: 86S-86N		3 km :: 20-35 km	

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product				Accuracy		Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel			
Schoeberl	O3 Conc	1313	MLS	MO	Waters	1328	AM	:: 10%	1/36 (d,n)	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 70 km
			SAFIRE	MO	Russell	1329	AM	:: 10% (20-40 km)	1/36-72 s [7]	25 x 2.5 dg :: 86S-86N	3 km :: 20-50 km
Schoeberl	O3(18000) Conc	1342	MLS	MO	Waters	1326	AM	:: 50%	2/day (d,n)	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: 20-60 km
			MLS	MO	Waters	1343	BM	10% :: 10%	1/wk	8 x 10 dg :: G	5 km :: Strat
Schoeberl	OCIO Conc	1351	SAFIRE	MO	Russell	1344	AM	:: 20%	2/day (d,n)	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: 20-60 km
			SAFIRE	MO	Russell	1345	AM	:: 15% (20-30 km)	1/36-72 s [7]	25 x 2.5 dg :: 86S-86N	3 km :: 20-35 km
Schoeberl	OH Conc	1356	SAFIRE	MO	Russell	1346	AM	:: 15% (20-35 km)	1/36-72 s [7]	25 x 2.5 dg :: 86S-86N	3 km :: 20-40 km
			SAGE-III	AERO,CHEM	McCormick	1353	BM	20% :: 0.01	1/wk [n]	8 x 10 dg :: G	3 km :: Strat
Schoeberl	Radiation Intensity, IR	2374	MLS	MO	Waters	1352	AM	10% :: 0.2a, 0.5m	1/2 min, 30/day	<2 x <1 dg :: G	2 km :: 15-25 km
			SAFIRE	MO	Russell	1360	BM	7% (30-75 km)	1/mo. [z. mean]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 25 km
Schoeberl	Radiation Intensity, UV	2411	MODIS	AM,PM	Salomonson	2347	BM	1% (-1K) :: 0.5%	1/day [d]	6 x 8 dg :: G	2 km :: Mid-atmos
			MODIS	AM,PM	Salomonson	2340	AM	0.2dg NEdT :: 0.2dg NEdT	1/day	100 km :: G	3 km :: 20-90 km
Schoeberl	Radiation Intensity, Visible	2413	SOLSTICE	MO	Rottman	2278	BM	5% :: 2%	1/day	15 x 15 km :: G	N/A :: N/A
			SOLSTICE	MO	Rottman	2277	AM	<5% :: <1%	1/hr	1 km :: G	N/A :: N/A
Schoeberl	SO2 Conc	1366	MODIS	AM,PM	Salomonson	2339	BM	5% :: 2%	1/day	:: G	:: Strat
			MODIS	AM,PM	Salomonson	2338	BM	5% (1x) :: RMS<NEdL	1/day	1 km :: G	N/A :: N/A
Schoeberl	Temperature Profile	1582	MODIS	AM,PM	Salomonson	2392	BM	5% (1x) :: RMS<NEdL	1/day	0.25 km :: G	N/A :: N/A
			MLS	MO	Waters	1369	BM	20% ::	1/wk	8 x 10 dg :: G	3 km :: Strat
Schoeberl	Aerosol Optical Depth	2288	TES	CHEM	Beer	1370	AM	:: 5x10-10	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 30 km
			TES	CHEM	Beer	1370	AM	:: 600 ppt	1/16 day	160 x 23 km :: G	2-3 km :: 4-12 km
Sellers	Aerosol XXX	1004	AIRS	PM	Oedin, Fleming,	1588	BM	2 K :: 1 K	1/day	2 x 2 dg :: G	2 km :: Atmos
			HIRDLS	CHEM	Barnett, Gille	1608	BM	1.0 K :: 0.4 K	2/day [d,n]	15 x 50 x 50 km :: G	1, 2 km :: Atmos
Sellers	Aerosol XXX	1004	SAGE-III	AERO,CHEM	McCormick	1611	BM	K:2K>50km :: 0.3K:1K<50k	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-80 km
			GGI	ALT	Melbourne	1605	AM	2 K :: 2 K	1/2 min, 30/day	<2 x <1 dg :: G	1 km :: 6-55 km
Sellers	Aerosol XXX	1004	MLS	MO	Waters	1609	AM	1 K :: 1 K	700 rel/day	1-200 km :: G	1 km :: 5 - 50 km
			SAFIRE	MO	Russell	1610	AM	:: 2K <100km	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 120 km
Sellers	Aerosol XXX	1004	SAGE-III	AERO,CHEM	McCormick	1612	AM	:: <0.5K(16-65 km)	1/18-72 s [7]	25 x 1.5 dg :: 86S-86N	1.5 km :: 10-110 km
			TES	CHEM	Beer	1614	AM	2 K :: 2 K	1/2 min, 30/day	<2 x <1 dg :: Polar	1 km :: 6-70 km
Sellers	Aerosol XXX	1004	TES	CHEM	Beer	1615	AM	:: 2 K	1/16 day	16 x 5 km :: G	1 km, 4-6 km :: 0-12 km
			TES	CHEM	Beer	1616	AM	:: 2 K	1/16 day	160 x 23 km :: G	2-3 km :: 13-30 km
Sellers	Aerosol XXX	1004	MODIS	AM,PM	Kaufman, Tarré	2293	BM	0.1 :: 0.05	1/day, 1/mo	160 x 23 km :: G	2-3 km :: 4-12 km
			MODIS	AM,PM	Tarré, Kaufman	2294	BM	0.05 :: 0.02	1/day, 1/mo	0.5 dg :: Land	N/A :: Atmos
Sellers	Aerosol XXX	1004	EOSP	AERO,AM2	Travis	2297	BM	0.2 :: 10%	1/day [d]	0.5 dg :: Ocean	N/A :: Atmos
			MISR	AM	Diner	2298*	AM	0.05/10% :: 0.05/10%	1/5-16 day [d]	40 km :: G	Column :: Atmos
Sellers	Aerosol XXX	1004	GLRS-A	ALT	Spinhorne et al	2291	AM	0.05/10% :: 0.05/10%	1/5-16 day [d]	1.92 km :: R	Column :: Atmos
			HIRIS	AM2	Gersl	2292	AM	20% ::	1/2-16 day	15.4 km :: G	Column :: Atmos
Sellers	Aerosol XXX	1004	MODIS	AM,PM	Kaufman, Tarré	2293	BM	0.05 :: 0.01	1/2-16 day	2-200 km :: G	N/A :: Atmos
			MODIS	AM,PM	Tarré, Kaufman	2294	BM	0.05 :: 0.02	1/2-16 day	100 m :: L	Column :: Atmos

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product			Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #			
Sellers	Aerosol XXX	1004	GLRS-A	ALT	Spinthorne et al	1014	AM	2-200 km :: G	75 m :: Atmos
Sellers	Albedo, Cloud	2007	SAGE-III	AERO-CHEM	McCormick	1012	AM	<2 x <1 dg :: G	1 km :: 0-40 km
			HIRIS	AM2	Welch	2008	BM	90 m :: R	:: Cloud
			MISR	AM	Diner	2038*	AM	240 m :: R	N/A :: Trop
Sellers	Albedo, Land_sfc	1999	AIRS	PM	Gautier ??	2000*	BM	100 km :: Land	N/A :: Sfc
Sellers	CO2 Conc	1141	TES	CHEM	Beer	3637	BM	16 x 5 km :: L	
Sellers	Cloud Cover	2059	CERES	TRM-AM-PM	Barkstrom	2087	BM	100 km ::	0.5 km :: Trop
			AIRS	PM	Chahine, Chedin,	2062	BM	1.25 x 1.25 dg :: G	N/A :: Atmos
			MODIS	AM-PM	King	2081	AM	15 x 15 - 50 x 50 km :: G	N/A :: Cloud
Sellers	Cloud Liq_water Total Column	1921	CERES	TRM-AM-PM	Barkstrom	1899	BM	5 km :: G	N/A :: Cloud
			AIRS	PM	Rosenkranz	1908*	AM	1.25 x 1.25 dg :: G	Column :: Atmos
Sellers	Cloud Temperature	2457	MODIS	AM-PM	Menzel	2466	BM	50 km :: G	N/A :: Cloud
			MODIS	AM-PM	Menzel	2467	BM	1 dg :: G	N/A :: Cloud
			AIRS	PM	Chahine, Chedin,	2463	AM	5 km :: G	N/A :: Cloud
			ASTER	AM1	Welch	2465	AM	15 x 15 - 50 x 50 km :: G	N/A :: Cloud
Sellers	Humidity Profile	1823	AIRS	PM	Chedin, Fleming,	1828	BM	90 m :: L	N/A :: Cloud
								100 km ::	0.5 km :: Trop
Sellers	Land_sfc Reflectance, Bi-directional Spectra	2041	MISR	AM	Diner	2632	BM	15 x 50 - 50 x 50 km :: G	2 km :: Atmos
			HIRIS	AM2	Gerstl	2035	BM	250-500 m :: Land	
			MODIS	AM-PM	Torre, Muller	2424*	AM	240 m :: R	N/A :: Sfc
			MODIS	AM-PM	Muller, Strahler, 1	3669*	AM	30 m :: Land/L	N/A :: Sfc
			MODIS	AM-PM	Kaufman et al	2430	AM	1 km :: G/R	N/A :: Sfc
			MODIS	AM-PM	Kaufman et al	2431	AM	1 km :: Land/R	N/A :: Sfc
			ASTER	AM1	Slater	2433	AM	0.01 :: 0.005	N/A :: Sfc
			HIRIS	AM2	Slater	2432	AM	0.01 :: 0.005	N/A :: Sfc
Sellers	Land_sfc Reflectance, Bi-directional, (BRDF)	2034	CERES	TRM-AM-PM	Barkstrom	2045	BM	0.25 km :: G	N/A :: Sfc
			MISR	AM	Diner	2631	BM	15.30 m :: Land/R, L	N/A :: Sfc
			MODIS	AM-PM	Torre, Muller	2425*	AM	30 m :: Land/R, L	N/A :: Sfc
			MODIS	AM-PM	Kaufman et al	2429	AM	10 dg [Angle] :: G	N/A :: Sfc-Atmos
			MODIS	AM-PM	Muller, Strahler, 1	3669*	AM	1.92 km ::	N/A :: Sfc
Sellers	Land_sfc Temperature	2478	ASTER	AM1	Kahle, Becker, Ch	2483	BM	10 km :: G, R	N/A :: Sfc
			MODIS	AM-PM	Wan	2484	BM	1 km :: G	N/A :: Sfc
								1 km :: R	N/A :: Sfc
								1 km :: Land/R	N/A :: Sfc
Sellers	Level-1B Radiance, MODIS	2389	MODIS	AM-PM	Salomonson	2338	BM	500 m ::	N/A :: Sfc
			MODIS	AM-PM	Salomonson	2339	BM	90 m :: Land	N/A :: Sfc
			MODIS	AM-PM	Salomonson	2340	BM	1 km :: Land/R	N/A :: Sfc
			MODIS	AM-PM	Salomonson	2392	BM	0.5 km :: G	N/A :: N/A
								1 km :: G	N/A :: N/A
								1 km :: G	N/A :: N/A
								0.25 km :: G	N/A :: N/A

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match		
Sellers	PBL Height	1513	GLRS-A	ALT	Spinlaine et al	1514	BM	2-200 km :: G	75 m :: Trop
	Precipitation Amount	1939	AIRS	PM	Suskind	1969*	BM	2mm/day :: 1mm/day	N/A :: Trop
Sellers	Precipitation Amount, Snow	1984	AIRS	PM	Saelin	3694*	AM	2mm/hr :: 1mm/hr	N/A :: Trop
	Precipitation Amount, Snow	1984	MODIS	PM	TBD	3600	AM	22 km :: Global	N/A :: Sfc
Sellers	Radiative Flux, LW, Down	2164	AIRS	PM	Saelin	3018*	AM	50 km :: Land	N/A :: Sfc
	Radiative Flux, LW, Down	2164	MODIS	PM	TBD	3607	AM	22 km :: Land	N/A :: Sfc
Sellers	Radiative Flux, LW, Up	2193	CERES	TRM,AM,PM	Barksom	1769	AM	1.25 x 1.25 dg :: G	N/A :: Atmos
	Radiative Flux, LW, Up	2193	CERES	TRM,AM,PM	Barksom	2170	BM	100 km :: Land	0.5 km ::
Sellers	Radiative Flux, SW, Down	2217	CERES	TRM,AM,PM	Barksom	2202	BM	100 km :: Land	0.5 km ::
	Radiative Flux, SW, Down	2217	CERES	TRM,AM,PM	Barksom	2146	BM	1.25 x 1.25 dg :: G	N/A :: Sfc
Sellers	Snow Cover	3015	MODIS	AM,PM	Salomonson	3020	BM	1.25 x 1.25 dg :: G	1yr :: Atmos
	Snow Cover	3015	AIRS	PM	Saelin	3018*	BM	1.25 x 1.25 dg :: G	1yr :: Atmos
Sellers	Soil Moisture	2967	MODIS	PM	TBD	3607	BM	100 km :: Land	N/A :: Sfc
	Soil Moisture	2967	MODIS	AM,PM	Salomonson	3021	AM	1 km :: Land/R	N/A :: Sfc
Sellers	Temperature Profile	1583	MODIS	PM	TBD	3605	BM	60 km :: Land	N/A :: Sfc
	Temperature Profile	1583	AIRS	PM	Chedin, Fleming,	1588	BM	100 km ::	0.5 km :: Trop
Sellers	Vegetation Biomass	2628	MODIS	AM,PM	Ustin, Westman	2620	BM	15 x 50 - 50 x 50 km :: G	1, 2 km :: Atmos
	Vegetation Biomass	2628	MODIS	AM,PM	Ustin, Westman	2614	BM	30 m :: Land/L	N/A :: Sfc
Sellers	Vegetation Cover	2740	MODIS	AM,PM	Strahler, Huete et	2670	BM	30 m :: Land/L	N/A :: Sfc
	Vegetation Cover	2740	MODIS	AM,PM	Ustin, Westman	2741	AM	100 km ::	N/A :: Sfc
Simard	Albedo, Snow	2019	MODIS	AM	Diner	2022	BM	5 km :: Land	N/A :: Sfc
	Albedo, Snow	2019	MODIS	PM	Gautier 71	2000*	BM	1.92 km :: G	N/A :: Sfc
Simard	Cloud Cover	2056	MODIS	AM,PM	Torre, Muller	2015*	AM	50 km :: Land	N/A :: Sfc
	Cloud Cover	2056	MODIS	AM,PM	Torre, Muller	2016*	AM	1 km :: G,R	N/A :: Sfc
Simard	Cloud Cover	2056	MODIS	AM,PM	Dozier	3665*	AM	10 km :: G,R	N/A :: Sfc
	Cloud Cover	2056	MODIS	AM,PM	Muller, Strahler,	3666*	AM	50 m :: Land/L	N/A :: Sfc
Simard	Cloud Cover	2056	MODIS	AM,PM	Muller, Strahler,	3666*	AM	1 km :: Land/R	N/A :: Sfc
	Cloud Cover	2056	MODIS	AM,PM	King	2081	BM	1 km :: Land/R	N/A :: Sfc
Simard	Cloud Cover	2056	MODIS	PM	Chahine, Chedin,	2062	AM	5 km :: G	N/A :: Cloud
	Cloud Cover	2056	MODIS	PM	Chahine, Chedin,	2062	AM	15 x 15 - 50 x 50 km :: G	N/A :: Cloud
Simard	Cloud Cover	2056	MODIS	PM	Chahine, Chedin,	2062	AM	25 km :: G	N/A :: Atmos
	Cloud Cover	2056	MODIS	PM	Chahine, Chedin,	2062	AM	1.25 x 1.25 dg :: G	N/A :: Atmos

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product				Accuracy			Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel							
Simard	Cloud Cover	2056	CERES	TRM,AM,PM	Barkstrom	2088	AM	5% :: 2%		1/day [Avg], 1/mo [Avg]		1.25 x 1.25 dg :: G		N/A :: Atmos	
			GLRS-A	ALT	Spinhome	2078	AM	1% ::		1/(2-16 day)		10-200 km :: G		N/A ::	
Simard	Glacier Displacement	2894	HIRIS	AM2	Kieffer	2895	BM	1% :: 0.2%		1/yr, 1/season		30 m :: Glacier/L		N/A :: Sfc	
			ASTER	AM1	Kieffer	2931	AM	20 m/yr :: 10 m/yr		1 yr		15 m :: Land/Cryo		N/A :: Sfc	
Simard	Ice_Sheet Displacement	2896	GLRS-A	ALT	Bentley	2897	BM	10 cm ::		1/yr, 1/season		100 km :: Land/R		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2932	AM	10 m/day :: 10 mm/day		1/mo		N/A :: Ocean/Cryo		N/A :: Sfc	
Simard	Ice_Sheet Elevation	2909	GLRS-A	ALT	Bentley	2912	BM	100 mm :: 100 mm		1/(3 mo)		10 km :: Land/R		N/A :: Sfc	
			ALT	ALT	Zwally	2911	AM	5m-5m ::		1/yr		75 m :: Land/Cryo		N/A :: Sfc	
Simard	Ice_Sheet Elevation	2910	ALT	ALT	Zwally	2911	BM	100 mm ::		1/(3 mo)		100 km :: Land		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2912	BM	5m-5m ::		1/yr		15 km :: Land/Cryo		N/A :: Sfc	
Simard	Ice_Sheet Thickness	3055	MODIS	AM,PM	Wan	2484	BM	1 C :: 1 C		2/day		1 km :: Land/R		N/A :: Sfc	
			ALT	ALT	Zwally	2911	BM	100 mm :: 100 mm		1/day, 1/wk		10 km :: R/Canada		N/A :: Sfc	
Simard	Ice_Sheet Thickness	3056	GLRS-A	ALT	Bentley	2912	BM	5m-5m ::		2/day		10 km :: Land/Cryo		N/A :: Sfc	
			ALT	ALT	Zwally	2911	BM	100 mm :: 100 mm		1/day, 1/wk		75 m :: Land/Cryo		N/A :: Sfc	
Simard	Land_sfc Temperature	3312	MODIS	AM,PM	Wan	2484	BM	1 C :: 1 C		2/day		1 km :: Land/R		N/A :: Sfc	
			MODIS	AM,PM	Wan	2485	BM	1.3 C :: 1 C		2/day		10 km :: R/Canada		N/A :: Sfc	
Simard	Precipitation Rate	1937	AIRS	PM	Chedin, Fleming	2481	BM	1.0 K :: 0.5 K		2/day [d,n]		50 km :: Land		N/A :: Sfc	
			MIMR	PM	TBD	3600	BM	20% ::		2/day		22 km :: Global		N/A :: Trop	
Simard	Radiative Flux, Net	2137	AIRS	PM	Susskind	1969*	AM	2mm/day :: 1mm/day		2/day [d,n]		50 km :: G		N/A :: Sfc	
			AIRS	PM	Saelin	3694*	AM	2mm/hr :: 1mm/hr		2/day [d,n]		50 km :: G		N/A :: Trop	
Simard	Sea_Ice Conc	3141	CERES	TRM,AM,PM	Barkstrom	2230	BM	10 W/m ² :: 2 W/m ²		1/day [Avg], 1/mo [Avg]		1.25 x 1.25 dg :: G		N/A :: Sfc	
			CERES	TRM,AM,PM	Barkstrom	2182	BM	5 W/m ² :: 2 W/m ²		1/day [Avg], 1/mo [Avg]		1.25 x 1.25 dg :: G		N/A :: Sfc	
Simard	Sea_Ice Cover	3183	MIMR	PM	TBD	3611	BM	10km/10% ::		1/(7 day)		10 km :: Canada/R		N/A :: Sfc	
			AIRS	PM	Chedin, Staelin	3151*	BM	50 cm ::				22 km :: Ocean/Cryo		N/A :: Sfc	
Simard	Sea_Ice Edge	3157	MIMR	PM	TBD	3611	BM	0.1 :: 0.1		2/day [d,n]		50 km :: Ocean/Cryo		N/A :: Sfc	
			MODIS	AM,PM	Salomonson	3153	BM	25km ::		1/(7 day)		25 km :: Canada/R		N/A :: Sfc	
Simard	Sea_Ice Edge	3190	MIMR	PM	TBD	3613	BM	<=5% :: <=5%		1/day, 1/wk, 1/mo		10 km :: Ocean/Cryo		N/A :: Sfc	
			MODIS	AM,PM	Salomonson	3153	BM	<=5% :: <=5%		1/day, 1/wk, 1/mo		10 km :: Ocean/Cryo		N/A :: Sfc	
Simard	Sea_Ice Extent	3162	MODIS	AM,PM	Salomonson	3153	BM	10km/10% ::		1/(7 day)		10 km :: Canada/R		N/A :: Sfc	
			MODIS	AM,PM	Salomonson	3153	BM	<=5% :: <=5%		1/day, 1/wk, 1/mo		10 km :: Ocean/Cryo		N/A :: Sfc	

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match		
Simard	Sea_Ice Extent	3162	MODIS	PM	TBD	3613	BM	22 km :: Ocean/Cryo	N/A :: Sfc
Simard	Sea_Ice Motion, Regional	3196	ASTER	AM1	Welch	3152	AM	500 m :: Canada/R	N/A :: Sfc
			ASTER	AM1	TBD	3630	AM	TBD :: Ocean/TBD	TBD :: TBD
Simard	Sea_Ice Temperature	3120	ASTER	AM1	Welch	3619	BM	90 m :: Canada/R	N/A :: Sfc
Simard	Snow Cover	3026	MODIS	AM/PM	Salomonson	3020	BM	10 km :: Canada/R	N/A :: Sfc
			MODIS	PM	TBD	3607	AM	10 km :: Land	N/A :: Sfc
Simard	Snow State	3043	HIRIS	AM2	Dozier	3019	BM	50 m :: Cryo/L	N/A :: Sfc
			HIRIS	AM2	Dozier	3029	BM	50 m :: Glacier/L	N/A :: Sfc
			HIRIS	AM2	Dozier	3038	AM	50 [km?] :: Snow/L	N/A :: Sfc
			HIRIS	AM2	Dozier	2943	AM	50 m :: Snow/L	N/A :: Sfc
Simard	Soil Moisture	2949	MODIS	PM	TBD	3605	BM	60 km :: Land	N/A :: Sfc
			MODIS	PM	TBD	3606	BM	1 dg :: Land	N/A :: Sfc
Simard	Soil Proportion, Bare	2788	MODIS	AM/PM	Strabler, Huete et al	2670	BM	5 km :: Land	N/A :: Sfc
			MODIS	AM/PM	Justice, Huete et al	2749	AM	10 km :: Land	N/A :: Sfc
Simard	Soil Temperature	3311	ASTER	AM1	Kahle, Becker, Qi	2483	BM	100 m :: R/Canada	N/A :: Sfc
Simard	Vegetation Evapotrans	1789	ASTER	AM1	Schmugge	1791	BM	90 m :: Land	N/A :: Sfc
Simard	Vegetation Extent	2720	MODIS	AM/PM	Strabler, Huete et al	2670	BM	90 m :: Land/R, L	N/A :: Sfc
			MODIS	AM/PM	Justice, Huete et al	2749	BM	5 km :: Land	N/A :: Sfc
			HIRIS	AM2	Ustin, Westman	2741	AM	10 km :: Land	N/A :: Sfc
Stokasz	Chlorophyll Conc	2563	MODIS	AM/PM	Clark	2571	BM	1 km :: Ocean [South Atlan]	N/A :: Sfc
			MODIS	AM/PM	Carder	2569	AM	1 km :: Ocean-I/L	N/A :: TOO
			MODIS	AM/PM	Carder	2570	AM	1 km :: Ocean-II/L	N/A :: TOO
			MODIS	AM/PM	Abbott	2566*	AM	1 km :: Ocean-I/G, R	N/A :: TOO
			MISR	AM	Diner	2588*	AM	1 km :: Ocean/R, L	N/A :: TOO
Stokasz	Cloud Cover	2060	MODIS	AM/PM	King	2081	BM	240 m :: Ocean/R	N/A :: Cloud
			AIRS	PM	Chahine, Chedin,	2062	AM	10 km :: Ocean [South Atlan]	N/A :: Cloud
Stokasz	Cloud Liq_water Total Column	1922	CERES	TRM/AM/PM	Barkstrom	1900	BM	15 x 15 - 50 x 50 km :: G	N/A :: Trop
			MODIS	PM	TBD	3598	AM	25 km :: G	Column :: Atmos
Stokasz	Humidity Profile, Specific	1824	AIRS	PM	Chedin, Fleming,	1828	BM	22 km :: Ocean	N/A :: Trop
			AIRS	PM	Rosenkranz	3692	BM	10 km :: Ocean [South Atlan]	2 km :: Atmos
Stokasz	Level-1B Backscatter Coef, ALT	2096	ALT	ALT	Fu	3464	BM	50 km :: G	2 km :: Atmos
Stokasz	Level-1B Backscatter Coef, STIKSCAT	2109	STIKSCAT	CHEM	Freilich	2108	BM	10 km :: Ocean [South Atlan]	N/A :: Sfc
								25 km :: G	N/A :: Sfc

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #			
Srokoaz	Level-1B Backscatter Waveforms, ALT	3125	ALT	ALT	Fu	3464	BM	0.02[bur] :: 0.1dB	10 km :: Ocean [South Atlan]
Srokoaz	Level-1B Radiance, MODIS	3310	MODIS	AM,PM	Salomonson	2338	BM	0.05% ::	1 km :: R
			MODIS	AM,PM	Salomonson	2339	BM	5%(1x) :: RMS<NEdL	0.5 km :: G
			MODIS	AM,PM	Salomonson	2340	BM	5%(1x) :: RMS<NEdL	1 km :: G
			MODIS	AM,PM	Salomonson	2392	BM	1%(1x) :: RMS<NEdL	1 km :: G
			MODIS	AM,PM	Salomonson	2392	BM	5%(1x) :: RMS<NEdL	0.25 km :: G
Srokoaz	Ocean Wave Height, Significant	3131	ALT	ALT	Fu	3129	BM	>(5m,3%) :: 0.1m	10 km :: Ocean/R
Srokoaz	Precipitable Water	1868	MODIS	AM,PM	Menzel	1875	BM	>5m,10% ::	7 km :: Ocean
			MIMR	PM	TBD	3596	BM	1kg/m ² :: 0.1kg/m ²	10 km :: Ocean [South Atlan]
			AIRS	PM	Chedin, Fleming,	1869	AM	10 mm :: 5 mm	5 km :: G
			AIRS	PM	Rosenkranz	3693	AM	5% :: 3%	22 km :: Ocean
Srokoaz	Precipitation Rate, Rain	1975	MIMR	PM	TBD	3600	BM	2 mm :: 1 mm	50 km :: G
			MIMR	PM	TBD	3600	BM	10% :: 1mm/hr	10 km :: Ocean [South Atlan]
Srokoaz	Radiative Flux, LW	2385	CERES	TRM,AM,PM	Barkstrom	2205	BM	10W/m ² :: 1W/m ²	10 km :: Ocean [South Atlan]
			AIRS	PM	Gautier	2177*	AM	5 W/m ² :: 2 W/m ²	25 km :: G
Srokoaz	Radiative Flux, SW	2400	AIRS	PM	Gautier	2233*	BM	<10 :: TBD	50 km :: Ocean
			CERES	TRM,AM,PM	Barkstrom	2221	AM	10W/m ² :: 1W/m ²	10 km :: Ocean [South Atlan]
			CERES	TRM,AM,PM	Barkstrom	2229	AM	<10 :: <5	50 km :: Ocean
			CERES	TRM,AM,PM	Barkstrom	2247	AM	15 W/m ² :: 2 W/m ²	1.25 dg :: G
			CERES	TRM,AM,PM	Barkstrom	2247	AM	15 W/m ² :: 2 W/m ²	1.25 dg :: G
Srokoaz	Sea_Ice Conc	3142	MIMR	PM	TBD	3611	BM	10% :: 1%	10 km :: Ocean/Cryo
Srokoaz	Sea_Ice Edge	3158	MIMR	PM	TBD	3613	BM	0.1 dg :: 0.01 dg	22 km :: Ocean/Cryo
			MODIS	AM,PM	Salomonson	3153	BM	<=5% :: <=5%	N/A :: Ocean/Cryo
			MODIS	AM,PM	Salomonson	3154	AM	<=5% :: <=5%	10 km :: Ocean/Cryo
			MIMR	PM	TBD	3611	AM	<=5% :: <=5%	1 km :: Ocean/Cryo,R
			ASTER	AM1	Welch	3152	AM		22 km :: Ocean/Cryo
Srokoaz	Sea_gfc Temperature (SST)	2520	MODIS	AM,PM	Brown	2527	BM	0.3 K(IR) :: 0.1 K	90 m :: Ocean/Cryo
			MODIS	AM,PM	Brown	2529	AM	0.3-0.5 K :: 0.1-0.3 K	100-1 km :: Ocean [South Atlan]
			MODIS	AM,PM	Brown, Barton	2530	AM	0.3-0.6K :: 0.1-0.3K	1 km :: Ocean/L
			MODIS	AM,PM	Brown, Barton	2530	AM	0.3-0.6K :: 0.1-0.3K	4 km :: Ocean/R,L
Srokoaz	Temperature Profile	1584	AIRS	PM	Chedin, Fleming,	1588	BM	1 K :: 0.1 K	10 km :: Ocean [South Atlan]
			TES	CHEM	Beer	1614	AM	1.0 K :: 0.4 K	15 x 50 - 50 x 50 km :: G
Srokoaz	Topographic Elevation, Sea_gfc	3107	ALT	ALT	Fu	3108	BM	0.02m :: 0.01m	16 x 5 km :: G
			STIKSCAT	CHEM	Freilich	1680	BM	5cm et al ::	10 km :: Ocean/R
Srokoaz	Wind Direction	1703	STIKSCAT	CHEM	Freilich	1680	BM	10 dg :: 1 dg	25 km :: Ocean
			MIMR	PM	TBD	3594	BM	10% :: 16 deg	25 km :: Ocean [South Atlan]
Srokoaz	Wind Speed, Sea_gfc	1716	STIKSCAT	CHEM	Freilich	1680	BM	1 m/s :: 0.1 m/s	25 km :: Ocean [South Atlan]
			MIMR	PM	TBD	3594	BM	10% :: 16 deg	39 km :: Ocean
			STIKSCAT	CHEM	Freilich	1680	BM	10% :: 16 deg	25 km :: Ocean

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy		Temporal Resolution		Horizontal		Vertical	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.
Srokosz	Wind Velocity, Friction	1684	STIKSCAT	CHEM	Freilich	1680	BM	5% 5 dg :: 0.1 m/s, 1 dg	1/day	25 km :: Ocean [South Atlantic]	25 km :: Ocean	N/A :: Sfc	N/A :: Sfc
			STIKSCAT	CHEM	Freilich	1679	AM	7% 16 dg	1/2 day	1 dg :: Ocean	1 dg :: Ocean	N/A :: Near_Sfc	N/A :: Near_Sfc
Tapley	Humidity Profile	1825	AIRS	PM	Chedin, Fleming,	1828	BM	5% ::	4/day	50 km :: G	50 km :: G	1 km :: Atmos	1 km :: Atmos
			TES	CHEM	Beer	1842	AM	10% :: 5% 50 ppm	2/day [d,n] 1/16 day	15 x 50 - 50 x 50 km :: G 160 x 23 km :: G	15 x 50 - 50 x 50 km :: G 160 x 23 km :: G	2 km :: Atmos	2-3 km :: 4-12 km
Tapley	Wind Speed, Sea_sfc	1717	AIRS	PM	Aumann	1718*	BM	1 m/s ::	4/day	50 km :: Ocean	50 km :: Ocean	N/A :: Sfc	N/A :: Sfc
			MIMR	PM	TBD	3594	AM		1/day	50 km :: Ocean	50 km :: Ocean	N/A :: Sfc	N/A :: Sfc
Tapley	Wind Stress	1745	STIKSCAT	CHEM	Freilich	1746	BM	10% ::	4/day	50 km :: Ocean	50 km :: Ocean	N/A :: Sfc	N/A :: Sfc
			MIMR	PM	TBD	3594	BM			39 km :: Ocean	39 km :: Ocean	N/A :: Sfc	N/A :: Sfc
Wielicki	Aerosol Optical Depth	2289	EOSP	AERO_AM2	Travis	2297	BM	0.10 :: 0.10	1/day	1.25 dg :: G	1.25 dg :: G	N/A :: Atmos	N/A :: Atmos
			MODIS	AM_PM	Kaufman, Taine	2293	AM	0.2 :: 10%	1/day [d]	40 km :: G	40 km :: G	Column :: Atmos	Column :: Atmos
			MODIS	AM_PM	Taine, Kaufman	2294	AM	0.1 :: 0.05	1/day, 1mo	0.5 dg :: Land	0.5 dg :: Land	N/A :: Atmos	N/A :: Atmos
			MISR	AM	Diner	2299	AM	0.05 :: 0.02	1/day, 1mo	0.5 dg :: Ocean	0.5 dg :: Ocean	N/A :: Atmos	N/A :: Atmos
			GLRS-A	ALT	Spirhorne	2300	AM	0.05/10% :: 0.05/10%	1/5-16 day [d]	15.4 km :: G	15.4 km :: G	Column :: Atmos	Column :: Atmos
			CERES	TRM_AM_PM	Barkstrom	2027	BM	20% ::	1/2-16 day	1-100 km :: G	1-100 km :: G	N/A :: Sfc, Atmos	N/A :: Sfc, Atmos
Wielicki	Anisotropy, LW_broadband, Clear_sky	2025	CERES	TRM_AM_PM	Barkstrom	2027	BM	2% :: 1% 2% :: 0.5%		10 dg [Angle] :: G	10 dg [Angle] :: G	N/A :: Sfc, Atmos	N/A :: Sfc, Atmos
			CERES	TRM_AM_PM	Barkstrom	2027	BM	2% :: 1% 2% :: 0.5%		10 dg [Angle] :: G	10 dg [Angle] :: G	N/A :: Sfc, Atmos	N/A :: Sfc, Atmos
Wielicki	Cloud Cover	2061	CERES	TRM_AM_PM	Barkstrom	2086	BM	5% :: 2%	6/day [d,n]	25-100 km :: G	25 km :: G	N/A :: Atmos	N/A :: Atmos
			AIRS	PM	Chahine, Chedin,	2062	AM	0.05 :: 0.025	2/day [d,n]	15 x 15 - 50 x 50 km :: G	15 x 15 - 50 x 50 km :: G	N/A :: Cloud	N/A :: Cloud
			MODIS	AM_PM	King	2081	AM	10% :: 5%	2/day [d,n], 1mo	5 km :: G	5 km :: G	N/A :: Cloud	N/A :: Cloud
			HIRIS	AM2	Welch	2079	BM	2% :: 2%	1/16 day	30 m :: R	30 m :: R	N/A :: Atmos	N/A :: Atmos
Wielicki	Cloud Drop Phase	1760	ASTER	AM1	Welch	2080	AM	1% :: 0.5%	1/1-3 min, 1/2-16 day	30 m :: L	30 m :: L	Cloud	Cloud
			ASTER	AM1	Welch	1763	BM	3% :: 3%	1/16 day	90 m :: L	90 m :: L	N/A :: Cloud	N/A :: Cloud
			MODIS	AM_PM	King, Menzel	1764	BM	water/ice ::	1/16 day	15-30 m :: L	15-30 m :: L	N/A :: Cloud	N/A :: Cloud
			HIRIS	AM2	Welch	1762	AM	25% :: 10%	1/2-16 day	5 km :: G	5 km :: G	N/A :: Cloud	N/A :: Cloud
Wielicki	Cloud Drop Phase	1761	CERES	TRM_AM_PM	Barkstrom	1768	BM	90% Conf :: 90% Conf	6/day [d,n]	30 m :: L	30 m :: L	N/A :: Cloud	N/A :: Cloud
			MODIS	AM_PM	King, Menzel	1764	AM	90% Conf :: 90% Conf	6/day [d,n]	25-100 km :: G	25 km :: G	N/A :: Atmos	N/A :: Atmos
			EOSP	AERO_AM2	Travis	1770	AM	90% Conf :: 90% Conf	1/day	5 km :: G	5 km :: G	N/A :: Cloud	N/A :: Cloud
								95% Corr	1/day [d]	100 km :: G	100 km :: G	N/A :: Cloud	N/A :: Cloud
Wielicki	Cloud Drop Size	1771	ASTER	AM1	Welch	1779	BM	25% :: 10%	1/16 day	0.3-10 km :: R	0.3-10 km :: R	N/A :: Atmos	N/A :: Atmos
			MODIS	AM_PM	King, Menzel	1780	BM	10 um ::	1/16 day	15-90 m :: L	15-90 m :: L	Cloud	Cloud
			HIRIS	AM2	Welch	1776	AM	0-40% :: 5%	1/day	5 km :: G	5 km :: G	N/A :: Cloud	N/A :: Cloud
			HIRIS	AM2	Welch	1778	AM	20% :: 10%	1/2-16 day	30 m :: L	30 m :: L	Cloud	Cloud
Wielicki	Cloud Drop Size	1772	CERES	TRM_AM_PM	Barkstrom	1784	BM	10 um ::	1/2-16 day	30 m :: L	30 m :: L	Cloud	Cloud
			MODIS	AM_PM	King, Menzel	1780	AM	30% :: 10%	6/day [d,n]	25-100 km :: G	25 km :: G	N/A :: Atmos	N/A :: Atmos
								0-40% :: 5%	1/day	5 km :: G	5 km :: G	N/A :: Cloud	N/A :: Cloud
			CERES	TRM_AM_PM	Barkstrom	1393	BM	1 km :: 0.1 km	6/day [d,n]	25-100 km :: G	25 km :: G	0.1 km :: Atmos	0.1 km :: Atmos

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match		
Wielich	Cloud Height, Base	1387	ASTER	AM1	Welch	1391	BM	0.1 km :: 0.1 km	0.1 km :: Atmos
			GLRS-A	ALT	Spinthorne et al	1389	AM	100 m :: 100 m	N/A :: Cloud
			HIRIS	AM2	Welch	1390	AM	75 m ::	75 m :: Cloud
								50 m :: 50 m	N/A :: Cloud
Wielich	Cloud Height, Base	1388	CERES	TRM,AM,PM	Barkstrom	1393	BM	0.1 km :: 0.1 km	0.1 km :: Atmos
								1.0 km :: 0.1 km	0.1 km :: Atmos
Wielich	Cloud Height, Top	1420	AIRS	PM	Chahine, Chedin,	1423*	BM	0.1 km :: 0.1 km	0.1 km :: Atmos
								0.5 km :: 0.25 km	0.1 km :: Atmos
Wielich	Cloud Height, Top	1421	ASTER	AM1	Welch	1427	BM	0.1 km :: 0.1 km	0.1 km :: Atmos
			GLRS-A	ALT	Spinthorne et al	1425	AM	300 m :: 300 m	N/A :: Cloud
			HIRIS	AM2	Welch, Goetz	1426	AM	75 m ::	75 m :: Cloud
								500 m :: 250 m	N/A :: Cloud
Wielich	Cloud Height, Top	1422	CERES	TRM,AM,PM	Barkstrom	1429	BM	0.5 km :: 0.1 km	0.1 km :: Atmos
			CERES	TRM,AM,PM	Barkstrom	1431	AM	1.0 km :: 0.1 km	0.1 km :: Atmos
			MISR	AM	Diner	1432*	AM	0.5 km :: 0.1 km	0.1 km :: Atmos
								<1000 m :: <1000 m	N/A :: Trop
Wielich	Cloud Liq. water Content	1906	AIRS	PM	Rosenkranz	1908*	BM	20% :: 10%	N/A :: Atmos
			CERES	TRM,AM,PM	Barkstrom	1896	AM	0.1 :: 0.1	N/A :: Cloud
			MIMR	PM	TBD	3598	AM	75% :: 10%	N/A :: Atmos
								50% :: 10%	N/A :: Trop
Wielich	Cloud Liq. water Content	1907	CERES	TRM,AM,PM	Barkstrom	1896	BM	75% :: 10%	N/A :: Atmos
			AIRS	PM	Rosenkranz	1908*	AM	0.1 :: 0.1	N/A :: Cloud
			MIMR	PM	TBD	3598	AM	75% :: 10%	N/A :: Atmos
								50% :: 10%	N/A :: Trop
Wielich	Cloud Optical Depth, LW	2314	CERES	TRM,AM,PM	Barkstrom	2316	BM	25% :: 10%	N/A :: Atmos
								25% :: 10%	N/A :: Atmos
Wielich	Cloud Optical Depth, SW	2319	CERES	TRM,AM,PM	Barkstrom	2321	BM	25% :: 10%	N/A :: Atmos
			CERES	TRM,AM,PM	Barkstrom	2323	BM	25% :: 10%	N/A :: Atmos
Wielich	Cloud Reflectance, Bi-directional (BRDF)	3615	CERES	TRM,AM,PM	Barkstrom	3698	BM	25% :: 5%	N/A :: Atmos
			MISR	AM	Diner	2038*	BM	5% :: 2%	N/A :: Cloud
			MISR	AM	Diner	2039*	BM	5% :: 1%	N/A :: Trop
			EOSP	AERO,AM2	Travis	3644	AM	3% :: 1%	N/A :: Trop
Wielich	Cloud Reflectance, Bi-directional, (BRDF)	2423	MISR	AM	Diner	2038*	BM	5% :: 2%	N/A :: Cloud, Sfc
			MISR	AM	Diner	2039*	BM	3% :: 1%	N/A :: Cloud
			HIRIS	AM2	Welch	2037	AM	3% :: 1%	N/A :: Trop
								3% :: 1%	N/A :: Trop
Wielich	Humidity Profile	1826	AIRS	PM	Chedin, Fleming,	1828	BM	20% :: 10%	2 km :: Atmos
								10% :: 5%	2 km :: Atmos
Wielich	Land_gfc Emissivity	2120	AIRS	PM	Chedin, Fleming,	2113*	BM	0.025 :: 0.025	N/A :: Sfc
			MODIS	AM,PM	Barton	2111*	BM	0.05 :: 0.025	N/A :: Sfc
Wielich	Land_gfc Reflectance, Bi-directional, SW, Br	2043	MISR	AM	Diner	2631	BM	0.01 :: 0.01	N/A :: Sfc
			MISR	AM	Diner	2632	BM	5% :: 2%	N/A :: Sfc, Atmos
			MODIS	AM,PM	Muller, Strahler,	3669*	BM	5% :: 2%	N/A :: Sfc
								5% :: 3%	N/A :: Sfc

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product			EOS Instrument Output Data Product				Accuracy			Temporal Resolution		Horizontal		Vertical	
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #	Match	Abs	Rel	Resolution	Resol	Resol	Resol	Resol	Resol
Wielicki	Land_sfc Reflectance, Bi-directional, SW, Br	2044	CERES	TRM,AM,PM	Barkstrom	2045	BM	5% :: 2%			10 dg [Angle] :: G	10 dg [Angle] :: G	N/A :: Sfc, Atmos		
Wielicki	Land_sfc Temperature, Skin	2479	AIRS	PM	Chedin, Fleming, Wan	2481	BM	1 K :: 0.5 K		4/day [d,n]	1 K :: 0.5 K	1.25 dg :: Land	N/A :: Sfc		
			MODIS	AM,PM		2485	AM	1.0 K :: 0.5 K		2/day [d,n]	50 km :: Land	50 km :: Land	N/A :: Sfc		
								1-3 C :: 1 C		1/day, 1/hr	10 km :: Land	10 km :: Land	N/A :: Sfc		
Wielicki	Level-1B Radiance, CERES	2358	CERES	TRM,AM,PM	Barkstrom	2359	BM	SW2% :: 1W1% :: 0.005		6/day [d,n]	25 km :: R	25 km :: R	N/A :: Atmos		
								SW2% :: 1W1% :: 0.005		6/day [d,n]	0.25-1 km :: R	0.25-1 km :: R	N/A :: Atmos		
Wielicki	Level-1B Radiance, MODIS	2390	MODIS	AM,PM	Salomonson	2392	BM	5% (1K) :: RMS<NEdL		1/day	0.25 km :: G	0.25 km :: G	N/A :: N/A		
			MODIS	AM,PM	Salomonson	2338	BM	5% (1K) :: RMS<NEdL		1/day	0.5 km :: G	0.5 km :: G	N/A :: N/A		
			MODIS	AM,PM	Salomonson	2339	BM	5% (1K) :: RMS<NEdL		1/day	1 km :: G	1 km :: G	N/A :: N/A		
			MODIS	AM,PM	Salomonson	2340	BM	1% (1K) :: RMS<NEdL		1/day	1 km :: G	1 km :: G	N/A :: N/A		
Wielicki	Precipitation Amount	1940	AIRS	PM	Susskind	1949*	BM	50% :: 25%		4/day [d,n]	25-50 km :: G	25-50 km :: G	N/A :: Trop		
			AIRS	PM	Staelin	3694*	AM	2mm/day :: 1mm/day		2/day [d,n]	50 km :: G	50 km :: G	N/A :: Trop		
			MMR	PM	TBD	3600	AM	2mm/hr :: 1mm/hr		2/day [d,n]	50 km :: G	50 km :: G	N/A :: Trop		
											22 km :: Global	22 km :: Global	N/A :: Sfc		
Wielicki	Radiative Flux Divergence, LW	2150	CERES	TRM,AM,PM	Barkstrom	2145	BM	10% :: 5%		6/day [d,n]	1.25 dg :: G	1.25 dg :: G	Atmos		
			CERES	TRM,AM,PM	Barkstrom	2149	BM	10% :: 5%		6/day [d,n]	1.25 dg :: G	1.25 dg :: G	Atmos		
			CERES	TRM,AM,PM	Barkstrom	2146	AM	50% :: 10%		6/day [d,n]	1.25 dg :: G	1.25 dg :: G	Atmos		
			CERES	TRM,AM,PM	Barkstrom	2146	AM	10% :: 5%		1/6 hr	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	Atmos		
Wielicki	Radiative Flux Divergence, SW	2152	CERES	TRM,AM,PM	Barkstrom	2145	BM	10% :: 5%		3/day [d]	1.25 dg :: G	1.25 dg :: G	Atmos		
			CERES	TRM,AM,PM	Barkstrom	2149	BM	10% :: 5%		6/day [d,n]	1.25 dg :: G	1.25 dg :: G	Atmos		
			CERES	TRM,AM,PM	Barkstrom	2146	AM	10% :: 5%		1/6 hr	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	Atmos		
Wielicki	Radiative Flux, LW, Down	2165	CERES	TRM,AM,PM	Barkstrom	2169	BM	7 W/m ² :: 2 W/m ²		6/day [d,n]	1.25 dg :: G	1.25 dg :: G	N/A :: Sfc		
			CERES	TRM,AM,PM	Barkstrom	2180	BM	7 W/m ² :: 2 W/m ²		6/day [d,n]	1.25 dg :: G	1.25 dg :: G	N/A :: Sfc		
			CERES	TRM,AM,PM	Barkstrom	2176*	AM	7 W/m ² :: 2 W/m ²		6/day [d,n]	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	N/A :: Sfc		
			AIRS	PM	Gautier	2177*	AM	<15 :: TBD		1/day	50 km :: Land	50 km :: Land	N/A :: Sfc		
			AIRS	PM	Gautier	2177*	AM	<10 :: TBD		1/day	50 km :: Ocean	50 km :: Ocean	N/A :: Sfc		
Wielicki	Radiative Flux, LW, Up	2194	CERES	TRM,AM,PM	Barkstrom	2205	BM	5 W/m ² :: 2 W/m ²		6/day [d,n]	1.25 dg :: G	1.25 dg :: G	N/A :: TOA		
			CERES	TRM,AM,PM	Barkstrom	2201	BM	5 W/m ² :: 2 W/m ²		6/day [d,n]	1.25 dg :: G	1.25 dg :: G	N/A :: TOA		
Wielicki	Radiative Flux, LW, Up	2195	CERES	TRM,AM,PM	Barkstrom	2201	BM	7 W/m ² :: <7 W/m ²		6/day [d,n]	1.25 dg :: G	1.25 dg :: G	N/A :: Sfc		
Wielicki	Radiative Flux, SW, Down	2218	CERES	TRM,AM,PM	Barkstrom	2221	BM	15 W/m ² :: 2 W/m ²		3/day [d]	1.25 dg :: G	1.25 dg :: G	N/A :: Sfc		
			CERES	TRM,AM,PM	Barkstrom	2223	AM	15 W/m ² :: 2 W/m ²		1/6 hr	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	N/A :: Sfc		
Wielicki	Radiative Flux, SW, Net	2226	CERES	TRM,AM,PM	Barkstrom	2229	BM	15 W/m ² :: 2 W/m ²		3/day [d]	1.25 dg :: G	1.25 dg :: G	N/A :: Sfc		
			CERES	TRM,AM,PM	Barkstrom	2231	AM	15 W/m ² :: 2 W/m ²		3/day [d]	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	N/A :: Sfc		
			AIRS	PM	Gautier	2232*	AM	15 W/m ² :: 2 W/m ²		1/6 hr	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	N/A :: Sfc		
			AIRS	PM	Gautier	2233*	AM	<15 :: <5		1/day	50 km :: Land	50 km :: Land	N/A :: Sfc		
								<10 :: <5		1/day	50 km :: Ocean	50 km :: Ocean	N/A :: Sfc		
Wielicki	Radiative Flux, SW, Up	2241	CERES	TRM,AM,PM	Barkstrom	2246	BM	10 W/m ² :: 2 W/m ²		3/day [d]	1.25 dg :: G	1.25 dg :: G	N/A :: TOA		
			CERES	TRM,AM,PM	Barkstrom	2247	BM	12 W/m ² :: 2 W/m ²		3/day [d]	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	N/A :: TOA		
Wielicki	Radiative Flux, SW, Up	2242	CERES	TRM,AM,PM	Barkstrom	2247	BM	15 W/m ² :: 2 W/m ²		3/day [d]	1.25 dg :: G	1.25 dg :: G	N/A :: Sfc		
								10% :: 5%		1/day	1.25 dg :: G	1.25 dg :: G	N/A :: Sfc		
Wielicki	Sea_Ice Cover	2919	MMR	PM	TBD	3611	BM				50 km :: Ocean/Cryo	50 km :: Ocean/Cryo	N/A :: Sfc		
			AIRS	PM	Chedin, Staelin	3151*	AM	0.1 :: 0.1		2/day [d,n]	50 km :: Ocean/Cryo	50 km :: Ocean/Cryo	N/A :: Sfc		

Appendix L: IDS Input Requirements and Match Products by IDS Investigator

IDS Input Data Product		EOS Instrument Output Data Product					Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platforms	Investigator	Prod #				
Wielicki	Sea_sfc Temperature (SST)	2521	MODIS	AM,PM	Brown, Barton	2532	1 K :: 0.5 K	1/wk	1.25 dg :: Ocean	N/A :: Sfc
			MIMR	PM	TBD	3603	0.3-0.4K :: 0.1-0.6K	1/day, 1/wk, 1/mo	50 km :: Ocean	N/A :: Sfc
			MODIS	AM,PM	Brown	2528	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	60 km :: Ocean	N/A :: Sfc
			MODIS	AM,PM	Brown, Barton	2531	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G,R	N/A :: Sfc
			AIRS	PM	Chedin, Fleming,	2523*	0.5 - 1 K :: 0.4 - 0.5 K	2/day [d,n]	20 km :: Ocean/G,R	N/A :: Sfc
Wielicki	Snow Cover	3016					10% :: 5%	1/day	50 km :: Land	N/A :: Sfc
			MODIS	AM,PM	Salomonson	3020	<=5% :: <=5%	1/day, 1/wk	10 km :: Land	N/A :: Sfc
			MIMR	PM	TBD	3607			22 km :: Land	N/A :: Sfc
Wielicki	Temperature Profile	1585	AIRS	PM	Staelin	3018*		2/day [d,n]	50 km :: Land	N/A :: Sfc
							1 K :: 1 K	4/day [d,n]	1.25 dg :: G	1 km :: Atmos
Wielicki	Topographic Elevation, Land_sfc	2847			Chedin, Fleming,	1588	1.0 K :: 0.4 K	2/day [d,n]	15 x 50 - 50 x 50 km :: G	1, 2 km :: Atmos
			MISR	AM	Diner	2846*	200 m :: 200 m	1/mission	10 km :: Land	N/A :: Sfc
							100 m :: 100 m	1/mission	500 m :: Land	N/A :: Sfc

**IDS Input Requirements
Listed by
Instrument**

Appendix M

Science Processing Support Office (SPSO)

Goddard Space Flight Center

August 1992

Appendix M: IDS Input Requirements Listed by Instrument

Instrument Output Data Product			IDS Input Requirements					Temporal		Horizontal		Vertical	
Instrument	Platforms	Product Name	TM	Prod #	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.
AIRS/AMSU	PM	Cloud Cover	Chahine, Smith	2062				0.05 :: 0.025	2/day [d,n]	15 x 45 km :: G	15 x 45 km :: G	N/A :: Cloud	N/A :: Cloud
					Barron	2049	BM	5 :: 5	1/day	100 km :: G	100 km :: G	N/A :: Cloud	N/A :: Cloud
					Bates	2072	BM	0.05 :: 0.025	2/day [d,n]	15 x 45 km :: G	15 x 45 km :: G	N/A :: Cloud	N/A :: Cloud
					Hansen	2052	BM	3% ::	1/wk	500 km :: G	500 km :: G	0.5 km :: Trop	0.5 km :: Trop
					Sellers	2059	BM		4/day	100 km ::	100 km ::	N/A :: Cloud	N/A :: Cloud
					Harris	3436	AM	5-10% :: 2-5%	2/day	5-50 km :: Ocean/R	5-50 km :: Ocean/R	N/A :: Cloud	N/A :: Cloud
					Lin	2055	AM	10% ::		50 km :: R	50 km :: R	N/A :: Cloud	N/A :: Cloud
					Murakami	2058	AM	5% :: 5%	2/day	100 km :: Polar	100 km :: Polar	N/A :: Cloud	N/A :: Cloud
					Lau	2054	AM	0.1 :: 0.1	1/day	10 km :: Ocean [South Atlan]	10 km :: Ocean [South Atlan]	N/A :: Cloud	N/A :: Cloud
					Rodbrock	2076	AM	5% :: 1%	2/day	25-100 km :: G	25-100 km :: G	N/A :: Cloud	N/A :: Cloud
					Srokosz	2060	AM	2% :: 2%	6/day [d,n]			N/A :: Cloud	N/A :: Cloud
					Wielicki	2061	AM					N/A :: Cloud	N/A :: Cloud

The "best" and "alternative" matches were selected by comparing the stated IDS requirements with the output product specifications for these fields.

AIRS/AMSU output product #2062 has been identified by the SPSSO as a "best" or alternative match for these IDS input product requirements

Match Types are described in Table A-4.

Coverage keywords are described in Table A-3. Acronyms and abbreviations are described in Table A-1.

Legend for Appendix M: IDS Input Requirements Listed by Instrument

This table lists the anticipated output products from the EOS instruments that have been batched to IDS input product requirements

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product														
Instrument	Platform	Product Name	TM	Prod #	IDS Input Requirements									
ACRIM	MO	Irradiance, Solar, Total	Willson	2274	Investigator	Prod #	Match Type	Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.			
AIRS	PM	Wind Speed, Sea_sfc	Aumann	1718*	Hansen	2272	BM	0.1% :: 0.0005%	1/(2 min)	N/A :: N/A	N/A :: TOA			
					Lau	1739	BM	0.5 m/s :: 2%	1/day	50 km :: Ocean	N/A :: Sfc			
					Abbott	1708	BM	10% :: 5%	2/day	100 km :: G	N/A :: Sfc			
					Abbott	1707	BM	10% :: 5%	1/(1-2 day)	25 km :: Ocean [Southern]	N/A :: Sfc			
									1/(10-20 day)	25 km :: Ocean [Southern]	N/A :: Sfc			
					Tapley	1717	BM	1 m/s ::	4/day	50 km :: Ocean	N/A :: Sfc			
					Rodbrock	1669	AM	2 m/s :: 2 m/s	1/day	100 km :: Polar	N/A :: Near_sfc			
					Hansen	1663	AM	10% ::	1/wk	500 km :: Ocean	:: Sfc			
					Brewer	1710	AM	15% :: 5%	1/day, 1/week	25 km :: Ocean	N/A :: Sfc			
					Harris	3435	AM	5-10% :: 2-10%	1-10 days	1-25 km :: Ocean/R	N/A :: Sfc			
					Liu	1713	AM	1 :: 1	1/day	25 km :: Ocean	N/A :: Sfc			
AIRS	PM	Cloud Transmissivity, Spectral	Chachine	3685*				TBD :: TBD	2/day [d,n]	15 x 45 km :: G	N/A :: Cloud			
					Dickinson	3396	BM							
					Bates	1416	BM	0.5 km :: 0.25 km	2/day [d,n]	15 x 15 - 50 x 50 km :: G	N/A :: Cloud			
					Wielicki	1420	BM	0.5 km :: 0.25 km	2/day [d,n]	15 x 45 km :: G	N/A :: Cloud			
					Bates	1401	BM	0.1 km :: 0.1 km	2/day [d,n]	50 km :: R	0.1 km :: Atmos			
					Bates	1402	BM	500 m ::	2/day	50 km :: G	N/A :: Cloud			
					Lau	1402	BM	100 m ::	2/day	50 km :: G	N/A :: Atmos			
					Barron	1412	AM	100 m :: 25 m	1/day	100 m :: G	100 m :: Cloud			
					Dickinson	3349	AM							
					Harris	3437	AM	0.5 :: 0.3	2/day	20-50 km :: Ocean/R				
AIRS	PM	Cloud Height, Top	Chachine, Chedin, 1423*	2274										
					Murakami	1418	AM	1 km ::						
					Bates	1406	AM	50 m ::	2/day	50 km :: G	N/A :: Cloud			
					Hansen	1399	AM	50 m ::	1/wk	500 km :: G	:: Cloud			
					Rodbrock	1419	AM	0.2km :: 0.2km	1/day	100 km :: Polar	:: Cloud			
					AIRS	PM	Cloud Cover	Chachine, Chedin, 2062	2274				0.05 :: 0.025	2/day [d,n]
Barron	2049	BM	5 :: 5	1/day						100 km :: G	N/A :: Cloud			
Lau	2054	BM	5% :: 5%	2/day						50 km :: R	N/A :: Atmos			
Hansen	2052	BM	3% ::	1/wk						500 km :: G	:: Cloud			
Sellers	2059	BM		4/day						100 km ::	0.5 km :: Trop			
Harris	3436	AM	5-10% :: 2-5%	2/day						5-50 km :: Ocean/R				
Liu	2055	AM												
Murakami	2058	AM	10% ::								N/A :: Cloud			
Stuard	2056	AM	5% ::								N/A :: Cloud			
AIRS	PM	Cloud Temperature, Top	Chachine, Chedin, 2463	2274									0.05 :: 0.025	2/day [d,n]
					Bates	2072	AM		1/day	100 km :: G	0.5 km :: Trop			
					Bates	2069	AM	5% :: 5%	1/day	100 km :: G	N/A ::			
					Lau	2070	AM	0.1 :: 0.1	1/day	100 km :: Polar	N/A :: Cloud			
					Rodbrock	2076	AM	5% :: 1%	2/day	10 km :: Ocean [South Atlan]	N/A :: Cloud			
					Srokocz	2060	AM	5% :: 2%	6/day [d,n]	25-100 km :: G	N/A :: Atmos			
					Wielicki	2061	AM	1 K :: 0.5 K	2/day [d,n]	15 x 15 - 50 x 50 km :: G	N/A :: Cloud			

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument			Instrument Output Data Product			IDS Input Requirements			Accuracy	Temporal Resolution	Horizontal	Vertical
Platform	Product Name	TM	Prod #	Investigator	Prod # Match Type	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.	
AIRS	Cloud Emisivity, IR Spectral (3-14um)	Chadine, Smith	2128*	Dickinson	3372	BM	0.05 :: 0.025	2/day [d,n]	15 x 15 - 15 x 45 km :: G	<0.5-1 deg :: G	N/A :: Cloud	
				Liu	2546	BM					N/A :: Cloud	
				Moore	2360	AM	10% :: 10%	1/wk		1 km :: G	:: Cloud	
AIRS	Land_gfc Emisivity, Spectral	Chadine, Fleming,	2113*	Bates	2121	BM	0.05 :: 0.025	2/day [d,n]	15 x 15 - 50 x 50 km :: Land	10 km :: Polar	N/A :: Sfc	
				Bates	2112	BM	0.05 :: 0.025	2/day [d,n]		50 km :: Land	N/A :: Sfc	
				Clibber	3487	BM	0.025 :: 0.025	10 day		1.25 deg :: Canada/R	N/A :: Sfc	
				Wielicki	2120	BM	0.025 :: 0.025	2/day [d,n]		1.25 dg :: Land	N/A :: Sfc	
							1.0 K :: 0.5 K	2/day [d,n]		50 km :: Land	N/A :: Sfc	
AIRS	Land_gfc Temperature, Skin	Chadine, Fleming,	2481	Simard	3313	BM	1.3 :: 1.07	2day		10 km :: R/Canada	N/A :: Sfc	
				Harris	3450	BM	0.5 :: 0.2	2day		20-50 km :: Ocean/R		
				Bates	2475	BM	1.0 K :: 0.5 K	2/day [d,n]		50 km :: Land	N/A :: Sfc	
				Dickinson	3390	BM				Low_res :: Land		
				Barron	3052	BM	1 K ::	1/wk		100 km :: Land/Cryo	N/A :: Sfc	
				Hansen	2477	BM	0.2 C ::	1/wk		500 km :: Land	:: Sfc	
				Wielicki	2479	BM	1 K :: 0.5 K	4/day [d,n]		1.25 dg :: Land	N/A :: Sfc	
				Richey, Batism	2476	AM		1day		:: Land/R	N/A :: Sfc	
				Hansen	1629	AM	0.2 C ::	1/wk		500 km :: Land	:: Sfc	
				Dickinson	3388	AM				<0.5-1 deg :: Land/Cryo		
				Kerr, Sorooshian	2456	AM	0.5 K :: 0.5 K	2/day [d,n]		500 m :: Land/R	:: Sfc	
				Dickinson	3334	AM+				<0.5-1 deg :: G		
AIRS	Sea_gfc Temperature (SST), Skin	Chadine, Fleming,	2523*	Bates	2509	BM	0.5 - 1 K :: 0.4 - 0.5 K	2/day [d,n]		50 km :: Ocean	N/A :: Sfc	
				Lau	2514	BM	0.5 K ::	1/wk		50 km :: Ocean	N/A :: Sfc	
				Abbott	2505	BM	1 K :: 0.1 K	(1-2)/day		100 km :: Ocean	N/A :: Sfc	
				Barron	2506	BM	0.5 K ::	1day		50 km :: Ocean [Southern]	N/A :: Sfc	
				Lau	2516	BM	0.5 K ::	1day		100 km :: Ocean	N/A :: Sfc	
				Munkami	2518	AM	0.5 K :: R			90 km :: R	N/A :: Sfc	
				Lau	2515	AM	0.2 K ::			:: G	N/A :: Sfc	
				Hansen	1630	AM	0.2 K :: 0.2 K	1/wk		200 km :: Ocean	N/A :: Sfc	
				Dickinson	3392	AM	0.2 C ::	1/wk		500 km :: Ocean	N/A :: Sfc	
				Rotrock	2519	AM				<0.5-1 deg :: Ocean		
				Hansen	2512	AM	1 K :: 1 K	1/2 day		90 km :: G	N/A :: Sfc	
				Wielicki	2521	AM	0.2 C ::	1/wk		500 km :: Ocean	N/A :: Sfc	
				Abbott	2504	AM	1 K :: 0.5 K	1/wk		1.25 dg :: Ocean	N/A :: Sfc	
				Bates	2508	AM	0.5 K :: 0.05 K	(1-2)/day		1-4 km :: Ocean [Southern]	N/A :: Sfc	
				Brower	2511	AM	0.3-0.6 K :: 0.1-0.3 K	1day, 1/wk, 1mo		20 km :: Ocean/G/R	N/A :: Sfc	
							0.5 K :: 0.5 K	1day, 1/week		20 km :: Ocean	N/A :: Sfc	
AIRS	Land_gfc Temperature-Difference, Day-Night	Chadine, Fleming,	2539*	Bates	2538	BM	0.5 K :: 0.25 K	2/day [d,n]		50 km :: G	N/A :: Sfc	
				Dickinson	3395	BM	0.5 K :: 0.25 K	1day		50 km :: Land	N/A :: Sfc	
										<0.5-1 deg :: G		
AIRS	Temperature Profile	Chadine, Fleming,	1588	Bates	2538	BM	1.0 K :: 0.4 K	2/day [d,n]		15 x 50 - 50 x 50 km :: G	1, 2 km :: Atmos	
				Dickinson	3395	BM	10% :: 5%	1/day		25 km :: Ocean [Southern]	1 km :: Trop	
				Abbott	1563	BM	1 K :: 0.5 K	1day		100 km :: G	1 km :: Trop	
				Barron	1564	BM	1 K :: 0.5 K	1day		100 km :: G	1 km :: Trop	
				Bates	1571	BM	1.0 K :: 0.4 K	2/day [d,n]		50 km :: G	1 km :: Atmos	
				Dickinson	3333	BM				<0.5-1 deg :: G		
				Harris	3428	BM	1 :: 0.5	2day		10-50 km :: Ocean/R	1 km :: Atmos	
				Isacks	1576	BM	1 :: 0.4	1/wk		50 km :: Land/R	1 km :: Trop	

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument		Instrument Output Data Product		Instrument Input Requirements		Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Platform	Product Name	TM	Prod #	Investigator	Prod # Match Type				
AIRS	PM	Temperature Profile	Chedin, Fleming. 1588	Kerr, Soroshian	1577	BM	1 K :: 1 K	50 km :: Land	1 km :: Atmos
				Lau	1578	BM	1 K ::	100 km :: O	1 km :: Trop
				Murakami	1580	BM	1 % ::		
				Dickinson	3334	BM			
				Schnel	1632	BM	10% :: 1%	<0.5-1 deg :: G	
				Barron	1566	BM	0.5 ::	[multiple] :: 6 sites/L	N/A :: Sfc
				Hansen	1574	BM	0.3 C ::	100 km :: Ocean	N/A :: Sfc
				Hansen	1629	BM	0.2 C ::	500 km :: O	:: Trop
				Hansen	1630	BM	0.2 C ::	500 km :: Land	:: Sfc
				Hansen	1630	BM	0.2 C ::	500 km :: Ocean	:: Sfc
				Robrock	1627	BM	2 K :: 2 K	100 km :: Polar	N/A :: Near sfc
				Schoberl	1582	BM	2 K :: 1 K	2 x 2 dg :: G	2 km :: Atmos
				Wielicki	1585	BM	1 K :: 1 K	1.25 dg :: G	1 km :: Atmos
				Barron	1565	BM	1 K :: 0.5 K	10 km :: R	1 km :: Trop
				Hartmann	1575	BM	1 :: 1	10 km :: Ocean	1 km :: 0-15 km
				Liu	1579	BM	0.5 :: 0.5	25 km :: Ocean	0.5 km :: Trop
				Srokosz	1584	BM	1 K :: 0.1 K	10 km :: Ocean [South Allan]	
				Pyle	1581	BM	2 K :: 0.5 K	15 x 4 km :: G	2 km :: Strat
				Barron	1568	BM	0.5 ::	10 km :: Ocean/R	N/A :: Sfc
				Kerr, Soroshian	1631	BM	1 K :: 1 K	500 m :: Land/R	N/A :: Sfc
				Sellers	1583	BM	1 K ::	100 km ::	0.5 km :: Trop
				Hansen	1573	AM	0.3 C ::	500 km :: G	:: Strat
				Bates	1569	AM \$	1-2 K	1.8 x .16 dg :: G	3 km :: 20-60 km
							10% :: 5%	15 x 50 - 50 x 50 km :: G	2 km :: Atmos
				Barron	1807	BM	10% :: 5%	100 km :: G	:: Trop
				Bates	1809	BM	10% :: 5%	50 km :: G	2 km :: Atmos
				Dickinson	3353	BM		<0.5-1 deg :: G	
				Isachs	1815	BM	10% :: 0.05	50 km :: Land/R	2 km :: Trop
				Murakami	1818	BM	10% ::		
				Dickinson	3354	BM			
				Schoberl	1821	BM	10% :: 5% 0.05s	<0.5-1 deg :: G	N/A :: Near sfc
				Hansen	1813	BM	3% ::	2 x 3 dg :: G	1.5 km :: 0-Strat
				Robrock	1820	BM		500 km :: G	:: Trop
				Sellers	1823	BM	10% ::	100 km :: Polar	:: Near sfc
				Wielicki	1826	BM	20% :: 10%	100 km ::	0.5 km :: Trop
				Barron	1806	BM	10% :: 5%	1.25 dg :: G	2 km :: Atmos
				Srokosz	1824	BM	0.3 g/kg :: 0.1 g/kg	10 km :: R	:: Trop
				Pyle	1819	BM	10% :: 5%	10 km :: Ocean [South Allan]	
				Hartmann	1814	BM	10% :: 10%	15 x 4 km :: G	3 km :: Strat
				Liu	1817	BM	0.5 :: 0.5	10 km :: G	1 km :: 0-15 km
				Abbott	1805	BM	10% :: 5%	25 km :: Ocean	0.5 km :: Trop
				Harris	3438	BM	10% :: 5%	25 km :: Ocean [Southern]	1 km :: Trop
				Kerr, Soroshian	1816	BM	10% :: 10%	10-50 km :: Ocean/R	1 km :: Atmos
				Tapley	1825	BM	10% :: 10%	50 km :: Land	1 km :: Atmos
				Hansen	1812	AM	5% ::	50 km :: G	1 km :: Atmos
				Groze	1811	AM	15% :: 5%	500 km :: G	:: Atmos
AIRS	PM	Precipitable Water	Chedin, Fleming. 1869				5% :: 3%	30 x 4 dg :: G	3 km :: Trop/Ineo
				Barron	1861	BM	3% :: 1%	50 km :: G	N/A :: Trop
				Bates	1862	BM	5% :: 3%	100 km :: G	Column :: Trop
								50 km :: G	N/A :: Trop

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument			Instrument Output Data Product			IDS Input Requirements			Accuracy	Temporal	Horizontal	Vertical
Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.	
AIRS	PM	Precipitable Water	1869	Chedin, Fleming,	Dickinson	3355	BM				<0.5-1 deg :: G	
					Harris	3440	BM	5% :: 3%	2/day	20-50 km :: Ocean/R		
					Kerr, Sorooshian	1865	BM	10% :: 10%	2/day	50 km :: Land	Column :: Atmos	
					Murakami	1867	BM	20% ::				
					Richey, Batista	1810	BM	5% :: 5%	1/day	:: R	:: Trop	
					Hansen	1864	BM	3% ::	1/wk	500 km :: G	Column :: Strat	
					Abbott	1858	AM	10% :: 5%	1/(1-2 day)	25 km :: Ocean [Southern]	Column :: Trop	
					Liu	1866	AM	0.5 :: 0.5	1/day	25 km :: Ocean	Column :: Trop	
					Srokosz	1868	AM	11g/m ² :: 0.11g/m ²	2/day	10 km :: Ocean [South Atlan]	N/A :: Atmos	
								5 - 15% :: 3 - 10%	2/day [d.n]	50 km :: G	Column :: Atmos	
AIRS	PM	O3 Total Burden	1332*	Chedin, Revercon	Moore	1309	BM	25% :: 10%	1/day	100 km :: G	Atmos	
					Murakami	1331	AM	5-10% :: 2-10%				
					Kerr, Sorooshian	1308	AM	5% :: 5%	1/day	25 km :: G	Column :: Atmos	
								0.1 :: 0.1	2/day [d.n]	50 km :: Ocean/Cryo	N/A :: Sfc	
					Bates	3148	BM	10% :: 10%	2/day [d.n]	50 km :: Ocean/Cryo	N/A :: Sfc	
					Sinnard	3183	BM	50 cm ::		:: Canada/R	N/A :: Sfc	
					Rothrock	3103	BM	0.5 km :: 0.5 km	1/(3 day)	25 km :: Ocean/Cryo	N/A :: Sfc	
					Hansen	3150	BM	3% ::	1/wk	500 km :: Ocean/Cryo	:: Sfc	
					Rothrock	3188	BM	0.03 :: 0.03	1/(3 day)	25 km :: Ocean/Cryo	N/A :: Sfc	
					Wielicki	2919	AM	10% :: 5%	1/day	50 km :: Ocean/Cryo	N/A :: Sfc	
AIRS	PM	Radiative Flux, LW, Net	2176*	Gautier	Barron	3168	AM	5% :: 5%	1/day	10 km :: Ocean/Cryo	N/A :: Sfc	
								<15 :: TBD	1/day	50 km :: Land	N/A :: Sfc	
					Bates	2173	BM		2/day [d.n]	50 km :: Land	N/A ::	
					Dickinson	3376	AM			<0.5-1 deg :: G	N/A :: Sfc ?	
					Murakami	2183	AM	2% ::			N/A :: Atmos	
					Barron	2185	AM	10 :: 5	1/day	100 km :: G	N/A :: Sfc	
					Lau	2154	AM	10W/m ² :: 10%	1/day	500 km :: G	N/A :: Sfc	
					Wielicki	2175	AM	7 W/m ² :: 2 W/m ²	6/day [d.n]	1.25 dg :: G	N/A :: Sfc	
								<10 :: TBD	1/day	50 km :: Ocean	N/A :: Sfc	
					AIRS	PM	Radiative Flux, LW, Net	2177*	Gautier	Harris	3443	BM
Hartmann	2188	BM	5% :: 2%	1/day						<30 km :: Ocean	N/A :: Sfc	
Bates	2174	BM		2/day [d.n]						50 km :: Ocean	N/A ::	
Brewer	2256	AM		1/day, 1/week						:: Ocean		
Dickinson	3376	AM	2% ::							<0.5-1 deg :: G	N/A :: Sfc ?	
Murakami	2183	AM									N/A :: Atmos	
Barron	2185	AM	10 :: 5	1/day						100 km :: G	N/A :: Sfc	
Lau	2154	AM	10W/m ² :: 10%	1/day						500 km :: G	N/A :: Sfc	
Wielicki	2175	AM	7 W/m ² :: 2 W/m ²	6/day [d.n]						1.25 dg :: G	N/A :: Sfc	
Srokosz	2385	AM	10W/m ² :: 1W/m ²	2/day						10 km :: Ocean [South Atlan]		
AIRS	PM	Radiative Flux, SW, Net	2232*	Gautier				<15 :: <5	1/day	50 km :: Land	N/A :: Sfc	
					Hartmann	2214	BM	0.5% :: 0.5%	1/day	20 km :: G	N/A :: Sfc	
					Dickinson	3379	AM			<0.5-1 deg :: G	N/A :: Sfc	
					Murakami	2234	AM	2% ::			N/A :: Atmos	
					Barron	2237	AM	10 :: 5	1/day	100 km :: G	N/A :: Sfc	
					Lau	2215	AM	10W/m ² :: 10%	1/day	500 km :: G	N/A :: Sfc	
					Wielicki	2226	AM	15 W/m ² :: 2 W/m ²	3/day [d]	1.25 dg :: G	N/A :: Sfc	
								<10 :: <5	1/day	50 km :: Ocean	N/A :: Sfc	
					Harris	3443	BM	5% :: 2%	2/day	20-50 km :: Ocean/R		
					AIRS	PM	Radiative Flux, SW, Net	2233*	Gautier			

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument	Platform	Instrument Output Data Product			IDS Input Requirements			Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
		Product Name	TM	Prod #	Investigator	Prod #	Match Type				
AIRS	PM	Radiative Flux, SW, Net	Gauzier	2233*	Hartmann	2214	BM	0.5% :: 0.5%	1/day	20 km :: G	N/A :: Sfc
					Srokosz	2400	BM	10W/m ² :: 1W/m ²	2/day	10 km :: Ocean [South Atlas]	
					Brewer	1492	AM		1/day, 1/week	:: Ocean	
					Brewer	1493	AM		1/day, 1/week	:: Ocean/L	
					Dickinson	3379	AM			<0.5-1 deg :: G	N/A :: Sfc
					Barron	2237	AM	10 :: 5	1/day	100 km :: G	N/A :: Sfc
					Lau	2215	AM	10W/m ² :: 10%	1/day	500 km :: G	N/A :: Sfc
					Wielicki	2226	AM	15 W/m ² :: 2 W/m ²	3/day [d]	1.25 deg :: G	N/A :: Sfc
AIRS	PM	Albedo, Land, Sfc	Gauzier ??	2000*					1/day	50 km :: Land	N/A :: Sfc
					Bates	1995	BM		1/day	50 km :: Land	N/A :: Sfc
					Dickinson	3363	BM			<0.5-1 deg :: G	
					Sinnard	2019	BM	2% ::		:: Canada/R	N/A :: Sfc
					Hansen	2024	BM	0.02 ::	1/wk	500 km :: Land	:: Sfc
					Sellers	1999	BM	1% :: 10%	1/5 day	100 km :: Land	
					Hartmann	1997	AM	1% :: 0.5%	1/day	20 km :: G	N/A ::
					Barron	2013	AM	1% :: 1%	1/wk	10 km :: G	N/A :: Sfc
AIRS	PM	Radiative Flux, LW Spectral	Gauzier ??, Susk	2209*				<10 - TBD :: <5 - TBD	2/day [d,n]	50 km :: Land	N/A :: Sfc
					Barron	2185	AM	10 :: 5	1/day	100 km :: G	N/A :: Sfc
AIRS	PM	Radiative Flux, LW Spectral	Gauzier ??, Susk	2210*				<10 - TBD :: <5 - TBD	2/day [d,n]	50 km :: Ocean	N/A :: Sfc
					Barron	2185	AM	10 :: 5	1/day	100 km :: G	N/A :: Sfc
AIRS	PM	CO Total Burden	Revercomb, Strow	1130*				10 - 20 :: 6 - 15	2/day [d,n]	50 - 250 km :: G	Column :: Atmos
					Hansen	1075	AM	0.10% ::	1/wk	500 km :: Wetlands	:: Trop
					Hansen	1076	AM		1/wk	500 km :: G	:: Trop
					Hansen	1117	AM	0.10% ::	1/wk	500 km ::	:: Trop
					Moore	1118	AM	25% :: 10%	1/day	100 km :: G	:: Trop
AIRS	PM	N2O Total Burden	Revercomb, Strow	1249*				20 - 40 :: 15 - 30	2/day [d,n]	Zonal ave :: G	Column :: Atmos
					Hansen	1230	AM		1/wk	500 km :: G	:: Trop
AIRS	PM	Cloud Liq. water Content	Rosenkranz	1908*				0.1 :: 0.1	2/day [d,n]	50 km :: G	N/A :: Cloud
					Barron	1902	BM	0.1 :: 0.05	1/day	100 km :: G	1 km :: Cloud
					Bates	1904	BM			50 km :: G	N/A :: Cloud
					Dickinson	3358	BM	0.1 :: 0.1	2/day [d,n]	<0.5-1 deg :: G	
					Wielicki	1906	BM	20% :: 10%	2/day [d,n]	12-25 km :: G	N/A :: Atmos
					Sellers	1921	AM				
					Wielicki	1907	AM	50% :: 10%	6/day [d,n]	25-100 km :: G	N/A :: Atmos
					Abbott	1918	AM	10% :: 5%	1/1-2 day	25 km :: Ocean [Southern]	Column :: Trop
					Lau	1920	AM	0.05 :: 0.05	1/day	100 km :: G	N/A :: Trop
AIRS	PM	Stratosphere Height	Smith	1562*				1 km :: 0.5 km	2/day [d,n]	50 x 50 km :: G	N/A :: Mid-atmos
					Bates	1561	BM	1 km :: 0.5 km	2/day [d,n]	50 km :: G	N/A :: Mid-atmos
AIRS	PM	Cloud Optical Thickness	Smith, Gauzier ??	3684*				TBD :: TBD	1/day	15 x 15 - 15 x 45 km :: G	N/A :: Cloud
					Dickinson	3382	AM			<0.5-1 deg :: G	
								1 km :: 0.5 km	2/day [d,n]	50 x 50 km :: G	N/A :: Atmos
					Bates	1642	AM	75 m ::	2/day [d,n]	200 km :: G	75 m :: Trop
								TBD :: TBD	2/day [d,n]	50 km :: G	N/A :: Cloud
					Bates	1892	BM		2/day [d,n]	50 km :: G	N/A :: Cloud
					Bates	1890	BM	0.02 :: 0.02	1/day	10 km :: G	
					Hartmann	1785	BM	0.02 :: 0.02	1/day	10 km :: Ocean	N/A :: Cloud
AIRS	PM	Ice Sheet Cover Index	Staelin	2921*					2/day [d,n]	50 km :: Land/Cryo	N/A :: Sfc
					Bates	2918	BM		2/day [d,n]	50 km :: Land/Cryo	N/A :: Sfc

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product					
Instrument	Platforms	Product Name	TM	Prod #	
AIRS	PM	Snow Cover Index [combined with 2021]	Staelin	3018*	
IDS Input Requirements					
Investigator	Prod #	Match Type			
Bates	3006	BM			
Dickinson	3415	BM			
Sellers	3015	BM			
Hansen	3009	BM			
Murakami	3014	AM			
Wielicki	3016	AM			
Sellers	1984	AM-\$			
Barron	3003	AM			
Bates	3007	AM			
Bates	1968	BM			
Bates	1970	BM			
Brewer	1928	BM			
Brewer	1929	BM			
Hansen	1930	BM			
Harris	3441	BM			
Jacobs	1932	BM			
Lau	1936	BM			
Murakami	1938	BM			
Barron	1926	BM			
Lau	1935	BM			
Sellers	1939	BM			
Barron	1927	BM			
Hartmann	1931	BM			
Cibler	3488	BM			
Kerr, Sorooshian	1934	BM			
Moore	1974	BM			
Wielicki	1940	BM			
Cibler	3489	AM \$-			
Sinnard	1937	AM-			
Bates	2351	BM			
Bates	2346	BM			
Schoeberl	2374	BM			
Srokosz	1824	BM			
Liu	1817	BM			
Harris	3440	BM			
Abbott	1858	AM			
Barron	1861	AM			
Bates	1862	AM			
Murakami	1867	AM			
Liu	1866	AM			
Srokosz	1868	AM			
AIRS	PM	Precipitation Index	Sustkind	1969*	
AIRS [MHS]	PM	Level-1B Radiance, MHS	Chahine	2352	
AIRS[AIRS]	PM	Level-1B Radiance, AIRS	Chahine	2347	
AIRS/AMSU-A, PM		Humidity Profile, Microwave [see also 1828] Rosenkrantz		3692	
AIRS/AMSU-A, PM		Precipitable Water, Microwave [see also 186] Rosenkrantz		3693	

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product											
Instrument	Platforms	Product Name	TM	Prod #	IDS Input Requirements		Accuracy	Temporal	Horizontal	Vertical	
AIRS/AMSU-A, PM					Investigator	Prod #	Match Type	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.
Precipitation Index, Microwave (see also 1965Satelin								2mm/hr :: 1mm/hr	2/day [d,n]	50 km :: G	N/A :: Trop
3694*											
					Harris	3441	BM	2 :: 1	2/day	20-50 km :: Ocean/R	N/A :: Sfc
					Ciblier	3488	BM	0.1 mm :: 0.1 mm	1 day	500m :: Canada/R	N/A :: Sfc
					Bates	1968	AM	2mm/hr :: 1mm/hr	2/day [d,n]	50 km :: G	N/A :: Trop
					Bates	1970	AM		1/day	26-52 km :: Land	N/A :: Sfc
					Brewer	1928	AM	2 :: TBD	1/day, 1/season	:: Ocean/L	N/A :: Sfc
					Brewer	1929	AM	2 :: TBD	1/day, 1/season	:: Ocean	N/A :: Sfc
					Isacks	1932	AM		1/wk	5-50 km :: Land/R	N/A :: Sfc
					Lau	1936	AM	2 :: 2	1/day	50 km :: R	N/A :: Sfc
					Murakami	1938	AM	10% ::			
					Ciblier	3489	AM \$	10% :: 10%	1 wk	1 km :: Canada/R	N/A :: Sfc
					Sinard	1937	AM	20% ::		:: Canada/R	N/A :: Trop
					Barron	1926	AM	2 :: 1	1/day	100 km :: G	N/A :: Trop
					Hanson	1930	AM	10% ::	1/wk	500 km :: G	:: Sfc
					Sellers	1939	AM		4/day	100 km ::	
					Barron	1927	AM	2 :: 1	1/day	10 km :: R	N/A :: Trop
					Hartmann	1931	AM	10 :: 10	1/day	10 km :: Ocean	N/A :: Trop
					Kerr, Sorooshian	1934	AM	1 mm :: 1 mm	1/day	1 km :: Land/R	N/A :: Sfc
					Lau	1935	AM	2 :: 2	1/mo	500 km :: G	N/A :: Trop
					Moore	1974	AM	10% :: 10%	1/wk	1 km :: G	
					Wielicki	1940	AM	50% :: 25%	4/day [d,n]	25-50 km :: G	N/A :: Trop
AIRS/AMSU-A								0.2dg NEAT :: 0.2dg NEAT	2/day [d,n]	40 x 40 km :: G	N/A :: N/A
		Level-1B Radiance, AMSU-A	Chahine	2350				0.2dg NEAT :: 0.2dg NEAT	2/day [d,n]	40 x 40 km :: G	N/A :: N/A
ALT	ALT	Wind Speed, Along-track	F _u	1735				2 m/s ::		7 km :: Ocean	N/A :: Sfc
					Bates	2349	BM				
					Abbott	1708	BM	10% :: 5%	1/1-2 day	25 km :: Ocean [Southern]	N/A :: Sfc
					Harris	3435	BM	5-10% :: 2-10%	1-10 days	1-25 km :: Ocean/R	N/A :: Sfc
					Abbott	1707	BM	10% :: 5%	1/10-20 day	25 km :: Ocean [Southern]	N/A :: Sfc
ALT	ALT	Topographic Elevation, Sea_gfc	F _u	3108				5cm at al ::	1/16 day	25 km :: Ocean	N/A :: Sfc
					Abbott	3105	BM	5 cm :: 3 cm	1/10-20 day	10-20 km :: Ocean [Southern]	N/A :: Sfc
					Brewer	3106	BM	5% :: 1%	1/day, 1/season	7 km :: Ocean	N/A :: Sfc
					Harris	3429	BM	2% :: 1%	1-10 days	7-25 km :: Ocean/R	N/A :: Sfc
					Liu	3123	BM	3 cm :: 3 cm		:: Ocean	N/A :: Sfc
					Murakami	3122	BM	0.01 ::			N/A :: Sfc
					Srokosz	3107	BM	0.02m :: 0.01m	1/10 day	10 km :: Ocean/R	N/A :: Sfc
ALT	ALT	Sea Level Height, Along-track	F _u	3112				10 cm ::		7 km :: Ocean	N/A :: Sfc
					Abbott	3105	BM	5 cm :: 3 cm	1/10-20 day	10-20 km :: Ocean [Southern]	N/A :: Sfc
					Bates	3111	BM	10 cm ::		7 km :: Ocean	N/A :: Sfc
					Brewer	3106	BM	5% :: 1%	1/day, 1/season	7 km :: Ocean	N/A :: Sfc
					Harris	3427	BM	2% :: 1%	1-10 days	7-25 km :: Ocean/R	N/A :: Sfc
					Liu	3123	AM	3 cm :: 3 cm		:: Ocean	N/A :: Sfc
					Murakami	3122	AM	0.01 ::			N/A :: Sfc
								> 5m/10% ::		7 km :: Ocean	N/A :: Sfc
					Bates	3128	BM	>5m, 10% ::		7 km :: Ocean	N/A :: Sfc
					Harris	3431	BM	10-20% :: 5-20%	1-10 days	7-25 km :: Ocean/R	N/A :: Sfc
					Srokosz	3131	BM	<(5m,5%) :: 0.1m	1/day	10 km :: Ocean/R	N/A :: Sfc
					Abbott	3130	AM \$	10% :: 5%	1/10-20 day	10-20 km :: Ocean [Southern]	N/A :: Sfc
ALT	ALT	Ocean Wave Height, Along-track	F _u	3129				20% :: 20%	1/day	50-75 m :: Ocean	N/A :: Sfc
					Bates	3126	AM \$				N/A :: Sfc

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product				IDS Input Requirements			Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Instrument	Platform	Product Name	TM	Prod #	Investigator	Prod # Match Type				
ALT	ALT	Level-1B Backscatter, ALT	Fu	3464	Srokosz	2096	BM	0.2dB :: 0.1dB	10 km :: Ocean (South Atlan)	N/A :: Sfc
					Srokosz	3125	BM	0.02(bin) :: 0.1dB	10 km :: Ocean (South Atlan)	N/A :: Sfc
ALT	ALT	Ice Sheet Elevation	Zwally	2911	Barron	2906	BM	5m-3m ::	15 km :: Land/Cryo	N/A :: Sfc
					Sinnard	2910	BM	100 ::	10 km :: Land/Cryo	N/A :: Sfc
					Barron	3053	BM-	100 mm ::	100 km :: Land	N/A :: Sfc
					Sinnard	3055	BM-	100 mm ::	10 km :: Land/Cryo	N/A :: Sfc
					Barron	2907	BM	100 ::	10 km :: Land/R	N/A :: Sfc
					Barron	3054	BM-	100 ::	100 km :: Land/Cryo	N/A :: Sfc
					Sinnard	3056	BM-	100 mm ::	100 km :: Land/Cryo	N/A :: Sfc
					Sinnard	2909	AM	100 mm ::	10 km :: Land/R	N/A :: Sfc
					Isacks	2908	AM	0.1 ::	10 m :: Land/Cryo	N/A :: Sfc
ASTER	AMI	Vegetation Index (PVI)	Gillespie	2747*	Isacks	2744	BM	1 :: 0.5	15 m :: Land/R/L	N/A :: Sfc
					Barron	2739	AM	30 m ::	30-60 m :: Land/L	N/A :: Sfc
					Dickinson	3400	AM		High_res :: Land	N/A :: Sfc
					Bates	2676	AM		60 m :: Land	N/A :: Sfc
					Barron	2675	AM	0.5 :: 0.2	30 m :: Land/L	N/A :: Sfc
					Schimel	2678	AM	10% :: 1%	30 m :: 6 sites/L	N/A :: Sfc
					Isacks	2743	AM	1 :: 1	240-500 m :: Land/R	N/A :: Sfc
					Murakami	2745	AM		:: Land	N/A :: Sfc
					Chhlar	3504	AM	15% :: 15%	100 m :: Canada/R	N/A :: Sfc
ASTER	AMI	Soil Index	Gillespie	2801	Barron	2799	BM	5 ? :: 5 ?	15 m :: Land/R/L	N/A :: Sfc
					Kerr, Sorooshian	2792	BM		30 m :: Land/L	N/A :: Sfc
					Moore	2800	BM	15% :: 15%	1 km :: Land	:: Sfc
					Isacks	2778	AM		1/mission, 1/mo	N/A :: Sfc
					Barron	2794	AM	10% :: 5%	100 km :: Land	N/A :: Sfc
					Barron	2795	AM	10% :: 5%	30 m :: Land/L	N/A :: Sfc
					Barron	2787	AM	5 :: 5	30 m :: Land/L	N/A :: Sfc
					Barron	2796	AM	10% :: 5%	10 km :: Land/R	N/A :: Sfc
					Barron	2797	AM	5 ? :: 5 ?	100 km :: Land	N/A :: Sfc
					Barron	2798	AM	5 ? :: 5 ?	10 km :: Land/R	N/A :: Sfc
ASTER	AMI	Mineral Maps	Gillespie, Rowan, 2817*		Isacks	2778	AM	variable :: variable	90 m :: Land/R/L	N/A :: Sfc
					Kerr, Sorooshian	2802	AM		15-30 m :: Land/L	N/A :: Sfc
ASTER	AMI	Geologic Unit Maps (Geology Maps)	Gillespie, Rowan, 2883*		Isacks	2851	BM	variable :: variable	30 m :: Land/R	:: Sfc
					Kerr, Sorooshian	2882	BM		90 m :: Land/R/L	N/A :: Sfc
					Kerr, Sorooshian	2792	AM-		15-30 m :: Land/R	N/A :: Sfc
ASTER	AMI	Land_1ft Emissivity [1]	Kable, Becker, Cl 2124					0.05-0.1 :: 0.005	30 m :: Land/R	N/A :: Sfc
					Kerr, Sorooshian	2123	BM	0.05 :: 0.05	90 m :: Land/R	N/A :: Sfc
					Chhlar	3487	AM	0.025 :: 0.025	1.25 deg :: Canada/R	N/A :: Sfc
ASTER	AMI	Land_1ft Temperature (3-products)	Kable, Becker, Cl 2483					1-6 K :: 0.3 K	90 m :: Land	N/A :: Sfc
					Dickinson	3389	BM		High_res :: Land	N/A :: Sfc
					Isacks	2497	BM	1-6 :: 0.3	90 m :: Land/L	N/A :: Sfc
					Mouginis-Mark	3292	BM	10 C ::	30 m :: Land/L	N/A :: Sfc

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument	Platform	Instrument Output Data Product			IDS Input Requirements			Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
		Product Name	TM	Prod #	Investigator	Prod #	Match Type				
ASTER	AMI	Land_gf: Temperature (3-products)	Kahle, Becker, CI	2483	Sinaud	3311	BM	0.5 :: 1.0	2/day	100 m :: R/Canada	N/A :: Sfc
					Ciblar	3503	BM	0.5 K :: 1.0 K	1 day	250-1000 m :: Canada/R	N/A :: Sfc
					Lau	2501	BM	0.5 K :: 0.5 K	1/3 day	100 m :: Land/L	N/A :: Sfc
					Moore	2535	BM				:: Sfc
					Mouginis-Mark	3291	BM	2 C ::	1/3 mo	100 m :: Land/L	N/A :: Sfc
					Dozier	2500	BM	1 K :: 0.3 K	1/wk	500 m :: Snow/L	N/A :: Sfc
					Mouginis-Mark	3262	BM	30 m(hor) ::	2/day (d.a)	30 m :: Land/L	N/A :: Sfc
					Mouginis-Mark	3266	BM	(30m)Y2 ::	2/day (d.a)	30 m :: Land/L	N/A :: Sfc
					Schmid	1633	BM-	10% :: 1%	1/day, 1/wk	30 m :: 6 sites/L	N/A :: Sfc
					Sellers	2478	BM	::		500 m ::	
					Barroa	2472	BM	1 :: 0.5	1/day	30 m :: Land/L	N/A :: Sfc
					Mouginis-Mark	3295	BM	1 C ::	1/yr	30 m :: Land/L	N/A :: Sfc
					Richey, Batista	2476	AM		1/day	:: Land/R	N/A :: Sfc
					Lau	2502	AM	1 K :: 1 K	1/3 day	1 km :: Land/R	N/A :: Sfc
					Kerr, Sorooshian	2456	AM	0.5 K :: 0.5 K	2/day (d.a)	500 m :: Land/R	N/A :: Sfc
					Barroa	2473	AM	1 :: 0.5	1/day	10 km :: Land/R	N/A :: Sfc
								N/A :: N/A	1/10.5-16 day	90 m :: Land/R/L	N/A :: Sfc
					Iacks	2125	BM		1/yr	15-90 m :: Land/L	N/A :: Sfc
					Liu	2546	AM			:: G	N/A :: Cloud
									50 map optimization	90 m :: Land/R/L	N/A :: Sfc
ASTER	AMI	Land_gf: Emulsivity, Relative Spectral	Kahle, Becker, Sc	2129	Barroa	2795	BM	10% :: 5%	1/mission	30 m :: Land/L	N/A :: Sfc
					Kerr, Sorooshian	2792	BM		1/yr	30 m :: Land/R	:: Sfc
					Kerr, Sorooshian	2802	BM		1/yr	30 m :: Land/R	:: Sfc
					Barroa	2799	BM	5 ? :: 5 ?	1/yr	30 m :: Land/L	N/A :: Sfc
					Barroa	2794	BM	10% :: 5%	1/mission	100 km :: Land	N/A :: Sfc
					Barroa	2796	BM	10% :: 5%	1/mission	10 km :: Land/R	N/A :: Sfc
					Dickinson	3409	BM			Low_res :: Land	
					Moore	2800	BM	15% :: 15%	1/yr	1 km :: Land	:: Sfc
					Richey, Batista	2810	BM	20% :: 20%	1/yr	1 km :: Land/R	N/A :: Sfc
					Barroa	2786	AM	5 :: 5	1/yr	100 km :: Land	N/A :: Sfc
					Barroa	2797	AM	5 ? :: 5 ?	1/yr	100 km :: Land	N/A :: Sfc
					Barroa	2798	AM	5 ? :: 5 ?	1/yr	10 km :: Land/R	N/A :: Sfc
					Barroa	2785	AM	5 :: 5	1/yr	10 km :: Land/R	N/A :: Sfc
								>30 m :: >30 m	1/mission	15 m :: Land/R/L	30 m :: Sfc
					Barroa	2824	BM		1/mission	30 m :: Land/L	30 m :: Sfc
					Iacks	2833	BM	30 :: 10	1/mission	20 m :: Land/L	N/A :: Sfc
					Iacks	2837	BM	1 m :: 1 m	1/mission	point :: Land/L	N/A :: Sfc
					Kerr, Sorooshian	2834	BM	10 :: 10	1/yr	30 m :: Land/R	:: Sfc
					Mouginis-Mark	3276	BM	10 m(ver) ::	1/mission	30 m :: Land/L	N/A :: Sfc
					Lau	2835	BM	10 m :: 1 m	1/mission	10 m :: Land/L	N/A :: Sfc
ASTER	AMI	Topographic Elevation, Land_gf: (DEM)	Kahle, JGI	2828	Barroa	1546	BM	10% :: 0.1	1/mission, 1/yr	30 m :: Land/L	N/A :: Sfc
					Iacks	1553	BM	2 cm :: 1 cm	1/mission, 1/mo	30 m :: Land/L	N/A :: Sfc
					Kerr, Sorooshian	2830	BM	10 :: 5	1/yr	30 m :: Land/R	:: Sfc
					Kerr, Sorooshian	2845	BM	5 :: 5	1/yr	30 m :: Land/L	N/A :: Sfc
					Lau	1550	BM	10% :: 10%	1/yr	30 m :: Land/L	N/A :: Sfc
					Iacks	2839	BM	100 m :: 50 m	1/mission	50 m :: Land/R	N/A :: Sfc
					Dozier	2825	AM \$	10 m :: 1 m	1/mission	30 m :: Canada/R	10 m :: Sfc
										20 m :: Land/L	:: Sfc

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument	Platforms	Instrument Output Data Product			IDS Input Requirements		Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
		Product Name	TM	Prod #	Investigator	Prod # Match Type				
ASTER	AMI	Topographic Elevation, Land, sf, (DEM)	Kable, JGI	2828	Moore	2827 AM	1m ::			
					Baron	2905 AM \$	30 m ::	1/(3 mo)	30 m :: Land/L	N/A :: Sfc
					Baron	2849 AM \$	30 m ::	1/(3 mo)	30 m :: Land/L	N/A :: Sfc
					Isacks	2902 AM \$		1/mission, 1/yr	15-30 m :: Land/R	N/A :: Sfc
					Isacks	2851 AM		1/mission	15-30 m :: Land/R	N/A :: Sfc
					Isacks	2869 AM \$	10 cm :: 5 cm	1/mission	[2-D sect] :: Land/L	N/A :: Sfc
					Lau	2904 AM \$	100m*2 :: 100m*2	1/mission	10 m :: Land/L	N/A :: Sfc
					Dickinson	3410 AM			Low_res :: Land	
					Isacks	2838 AM	:: 120	1/mission	720 m :: Land/R	N/A :: Sfc
					Kerr, Sorooshian	2826 AM	50 m :: 50 m	1/mission	500 m :: Land	N/A :: Sfc
							20 m/yr :: 10 m/yr	1 yr	15 m :: Land/Cryo	
					Baron	2929 AM	::		:: Land/Cryo	N/A :: Sfc
					Simard	2894 AM	10 cm ::	1/yr, 1/season	:: Canada/R	N/A :: Sfc
							1-2 K :: 0.3 K		90 m :: Land/R/L	N/A :: Sfc
ASTER	AMI	Land, sf, Temperature-Difference, Day-Night Kieffer et al	Kieffer et al	2540	Bates	2538 AM	0.5 K :: 0.25 K	1/day	50 km :: Land	N/A :: Sfc
					Dickinson	3395 AM			<0.5-1 deg :: O	
							40% :: 20%		90 m :: Land/R/L	N/A :: Sfc
					Kerr, Sorooshian	2541 BM	.008 :: .004	1/(16 day)	60 m :: Land/R	N/A :: Sfc
							TBD :: 0.065-0.085	1/(2-16 day)	90 m :: Land/R/L	N/A :: Sfc
					Chibler	3494 BM	5% :: 10%	once	250-1000 m :: Canada/R	N/A :: Sfc
							variable :: variable		15-30, 90 m :: R/L	
					Mougins-Mark	3273 BM	1 km ::	1/orbit, 1/day	1 km :: Land/L	N/A :: Plume, col
					Mougins-Mark	3293 BM-	10 C ::	2/day [d.a]	100 m :: R	N/A :: Plume, col
					Mougins-Mark	3282 BM-		1/day	1 km :: Land/R	N/A :: Plume, col
					Mougins-Mark	3302 BM-		1/day	30 m :: Land/R	N/A :: Plume, col
							variable :: variable		15-30, 90 m :: Land/R/L	N/A ::
					Isacks	2778 AM		1/mission, 1/mo	15-30 m :: Land/L	N/A :: Sfc
							variable :: variable	25 scenes/yr	50 m :: Land/R/L	N/A :: Sfc
ASTER	AMI	Landform Lineament / Slope Maps	Roman	2856	Kerr, Sorooshian	2830 BM	10 :: 5	1/yr	30 m :: Land/R	:: Sfc
					Kerr, Sorooshian	2845 BM	5 :: 5	1/yr	30 m :: Land/R	:: Sfc
							10% :: 5%	15 scenes/yr	15-30, 90 m :: Land/R/L	N/A :: Sfc
					Isacks	2778 BM		1/mission, 1/mo	15-30 m :: Land/L	N/A :: Sfc
							1 mm/day :: 0.5 mm/day		90 m :: Land/R/L	N/A :: Sfc
					Chibler	3497 BM	20% :: 5-20%	1 day, 1 wk	500 m :: Canada/R	N/A :: Sfc
					Dickinson	3351 BM			High_res :: Land	
					Lau	1801 BM	10% :: 10%	1/day	1 km :: Land/L	N/A :: Sfc
					Murakami	1991 BM	0.02 ::			
					Simard	1789 BM			:: Canada/R	N/A :: Sfc
					Bates	1989 BM	1 :: 1	1/day	500 m :: Land	N/A :: Sfc
					Bates	1800 BM	0.5 :: 1	1/day	500 m :: Land	N/A :: Sfc
					Moore	3057 BM	20% :: 20%	1/day, 1/wk	500 m :: R	:: Sfc
					Bates	1990 BM	0.02 ::			
ASTER	AMI	Vegetation Evapotranspiration (ET)	Schmugge	1791	Dickinson	3352 BM			Med_res :: Land	
					Lau	1788 BM	10% :: 10%	1/day	1 km :: Land/L	N/A :: Sfc
					Lau	1802 BM	10% :: 10%	1/day	10 km :: Land/R	N/A :: Sfc
					Dickinson	3350 BM			<0.5-1 deg :: O	
					Lau	1804 BM	10% :: 10%	1/day	10 km :: Land/R	N/A :: Sfc
					Moore	3058 BM	20% :: 20%	1/day, 1/wk	30 m :: L	:: Sfc

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument		Instrument Output Data Product				IDS Input Requirements		Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Platform	Product Name	TM	Prod #	Investigator	Prod # Match Type	Abs :: Rel					
ASTER	AMI	Vegetation Evapotranspiration (ET)	1791	Schmid	1790	BM		20% :: 5%	1/wk	30 m :: 6 sites/L	N/A :: Sfc
ASTER	AMI	Land_96 Reflectance, Directional	2433	Kerr, Sorooshian	2428	BM		4% :: 0.5-1.3	3/yr	15-30 m :: Land/R/L	N/A :: Sfc
ASTER	AMI	Sea_Ice Area	3630	Sellers	2041	AM		3% :: 5%	1/2 mo	30 m :: Land/R	:: Sfc
ASTER	AMI	Land_96 Water Area	3633	Simard	3196	AM \$		TBD :: TBD	TBD	250-500 m :: Land	TBD :: TBD
ASTER	AMI							500 m ::	1/7 day	500 m :: Canada/R	N/A :: Sfc
ASTER	AMI							TBD :: TBD	TBD	TBD :: Land/TBD	TBD :: TBD
ASTER	AMI							::	1/wk	15-30 m :: Land/L	N/A :: Sfc
ASTER	AMI							100 ::	1/day	30 m :: Land/L	N/A :: Sfc
ASTER	AMI							10% :: 10%	1/day	:: Land/R	N/A :: Sfc
ASTER	AMI							100 ::	1/wk	1 km :: Land/R	N/A :: Sfc
ASTER	AMI							TBD :: TBD	TBD	TBD :: Land/TBD	TBD :: TBD
ASTER	AMI							5% :: 2%	1/hrs	15-30 m :: Land/L	N/A :: Sfc
ASTER	AMI							50 :: 10	1/wk	100 m :: Land/L	N/A :: Sfc
ASTER	AMI							100 m :: 100 m	1/16 day	100 m :: L	N/A :: Cloud
ASTER	AMI							0.1 km :: 0.1 km	1/16 day	0.2 km :: R	0.1 km :: Atmos
ASTER	AMI							200m :: 200m	1/hr	1 km :: Land	100 mb :: Trop
ASTER	AMI							100 m :: 50 m	1/day	30 m :: L	100 m :: Cloud
ASTER	AMI							300 m :: 300 m	1/16 day	90 m :: L	N/A :: Cloud
ASTER	AMI							0.1 km :: 0.1 km	1/16 day	0.2 km :: R	0.1 km :: Atmos
ASTER	AMI							100 m :: 25 m	1/day	30 m :: L	100 m :: Cloud
ASTER	AMI							water/ice ::	1/16 day	15-30 m :: L	N/A :: Cloud
ASTER	AMI							25% :: 10%	1/16 day	03-10 km :: R	N/A :: Atmos
ASTER	AMI							10 um ::	1/16 day	15-90 m :: L	:: Cloud
ASTER	AMI							25% :: 10%	1/16 day	03-10 km :: R	N/A :: Atmos
ASTER	AMI							3% :: 3%	1/16 day	90 m :: L	N/A :: Cloud
ASTER	AMI									High res :: G	
ASTER	AMI							5% :: 5%	1/day	10 km :: Land/R	N/A :: Cloud
ASTER	AMI							2% :: 2%	1/16 day	30 m :: R	N/A :: Atmos
ASTER	AMI							5 :: 5	1/day	30 m :: L	N/A :: Cloud
ASTER	AMI							10% :: 10%	1/wk	1 km :: G	
ASTER	AMI							3% :: 3%	1/16 day	15-30 m :: L	N/A :: Cloud
ASTER	AMI							3% :: 3%	1/day	30 m :: Ocean/L	N/A :: Cloud
ASTER	AMI							2 K :: 2 K	1/16 day	90 m :: L	N/A :: Cloud
ASTER	AMI							5% :: 5%	1/hr	500 m :: Land/R	:: Cloud
ASTER	AMI							2 :: 1	1/day	10 km :: R	N/A :: Cloud
ASTER	AMI									90 m :: Ocean/Cryo	N/A :: Sfc
ASTER	AMI							5% :: 5%	1/day	30 m :: Ocean/Cryo	N/A :: Sfc
ASTER	AMI							0.1 dg :: 0.01 dg	1/day	N/A :: Ocean/Cryo	N/A :: Sfc
ASTER	AMI							500 m ::	1/7 day	500 m :: Canada/R	N/A :: Sfc
ASTER	AMI							5% :: 5%	1/day	25 km :: Ocean/Cryo	N/A :: Sfc
ASTER	AMI							5% :: 5%	1/day	10 km :: Ocean/Cryo	N/A :: Sfc
ASTER	AMI							25km ::	1/7 day	25 km :: Canada/R	N/A :: Sfc
ASTER	AMI							5% :: 5%	1/day	90 m :: Ocean/Cryo	N/A :: Sfc
ASTER	AMI							5% :: 5%	1/day	100 km :: Ocean/Cryo	N/A :: Sfc
ASTER	AMI							0.3 K ::		90 m :: Canada/R	N/A :: Sfc

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument			Instrument Output Data Product		IDS Input Requirements		Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type				
ASTER	Sea Ice Temperature	Welch	3619	Bates	2489	BM		1/day	10 km :: Polar	N/A :: Sfc
ASTER	Sea Ice Temperature (SST)	Welch	3620						90 m :: Ocean/Cryo	N/A :: Sfc
ASTER	Sea Ice Lead (Open Water) Size-distribution	Welch	3622	Brewer	2510	BM	0.5 K :: 0.5 K	1/day, 1/week	30 m :: Ocean/L	N/A :: Sfc
ASTER	Sea Ice Albedo	Welch	3624	Barron	3166	BM	5% :: 5%	1/day	90 m :: Ocean/Cryo	N/A :: Sfc
ASTER	Cloud Liquid Water Content	Welch	3626	Barron	3004	BM	5% :: 5%	1/day	100 km :: Ocean/Cryo	N/A :: Sfc
ASTER	Cloud Drop Size-distribution	Welch	3627	Dickinson	3362	BM	5% :: 5%	1/day	90 m :: Ocean/Cryo	N/A :: Sfc
ASTER	Cloud Drop Size-distribution	Welch	3627	Kerr, Soroshian	1905	BM		1/(16 day)	90 m :: L	N/A :: Cloud
ASTER	Cloud Drop Size-distribution	Welch	3627	Barron	1903	AM	0.1 :: 0.05	1/day	30 m :: Land/R	1 km :: Cloud
ASTER	Cloud Drop Size-distribution	Welch	3627	Dickinson	3348	BM		1/(16 day)	90 m :: L	N/A :: Cloud
ASTER	Cloud Drop Size-distribution	Welch	3627	Hartmann	1775	BM	20% :: 20%	1/day	10 km :: R	1 km :: Cloud
CERES	TRM,AM,PM Cloud Height, Base	Barkstrom	1393						<0.5-1 deg :: G	
CERES	TRM,AM,PM Cloud Height, Base	Barkstrom	1393	Bates	1383	BM	1.0 km :: 0.1 km	1/day	10 km :: G	0-15 km :: Cloud
CERES	TRM,AM,PM Cloud Height, Base	Barkstrom	1393	Wielicki	1386	BM	:: 100 mb	6/day [d,n]	25 km :: G	0.1 km :: Atmos
CERES	TRM,AM,PM Cloud Height, Base	Barkstrom	1393	Wielicki	1386	BM	1 km :: 0.1 km	6/day [d,n]	25-100 km :: G	100 mb :: Cloud
CERES	TRM,AM,PM Cloud Height, Base	Barkstrom	1393	Wielicki	1386	BM	0.1 km :: 0.1 km	2/day [d,n]	50 km :: R	0.1 km :: Atmos
CERES	TRM,AM,PM Cloud Height, Base	Barkstrom	1393	Barron	1380	BM	100 m :: 50 m	1/day	100 km :: G	100 m :: Cloud
CERES	TRM,AM,PM Cloud Height, Base	Barkstrom	1393	Barron	1381	BM	100 m :: 50 m	1/day	10 km :: R	100 m :: Cloud
CERES	TRM,AM,PM Cloud Height, Base	Barkstrom	1393	Kerr, Soroshian	1385	BM	200m :: 200m	1/hr	1 km :: Land	100 mb :: Trop
CERES	TRM,AM,PM Cloud Height, Base	Barkstrom	1393	Bates	1384	BM	1.0 km :: 0.1 km	1/(6 hr)	1.25 x 1.25 dg :: G	0.1 km :: Atmos
CERES	TRM,AM,PM Cloud Height, Base	Barkstrom	1393	Bates	1384	BM	:: 100 mb	1/(6 hr)	1 x 1 dg :: G	100 mb :: Cloud
CERES	TRM,AM,PM Cloud Height, Base	Barkstrom	1393	Barron	1380	BM	1.0 km :: 0.1 km	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	0.1 km :: Atmos
CERES	TRM,AM,PM Cloud Height, Base	Barkstrom	1393	Dickinson	3342	BM	100 m :: 50 m	1/day	100 km :: G	100 m :: Cloud
CERES	TRM,AM,PM Cloud Height, Base	Barkstrom	1393	Hansen	1399	BM	50 m ::	1/wk	500 km :: G	:: Cloud
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429							
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Wielicki	1422	BM	1.0 km :: 0.1 km	6/day [d,n]	25 km :: G	0.1 km :: Atmos
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Barron	1413	BM	0.5 km :: 0.1 km	6/day [d,n]	25-100 km :: G	0.1 km :: Atmos
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Harris	3437	BM	100 m :: 25 m	1/day	10 km :: R	100 m :: Cloud
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Dickinson	3349	AM	0.5 :: 0.3	2/day	20-50 km :: Ocean/R	
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Bates	1415	AM	:: 100 mb	1/(6 hr)	<0.5-1 deg :: G	
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Bates	1416	AM	0.5 km :: 0.25 km	2/day [d,n]	1 x 1 dg :: G	100 mb :: Cloud
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Bates	1416	AM	1.0 km :: 0.1 km	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	N/A :: Cloud
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Barron	1412	BM	100 m :: 25 m	1/day	100 km :: G	100 m :: Cloud
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Dickinson	3349	BM			<0.5-1 deg :: G	
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Murakami	1418	BM	1 km ::	1/day	100 km :: Polar	:: Cloud
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Robrock	1419	BM	0.2km :: 0.2km	1/day	500 km :: G	:: Cloud
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Hansen	1399	BM	50 m ::	1/wk	100 km :: Polar	:: Cloud
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Bates	1415	BM	0.5 km :: 0.1 km	1/(6 hr)	1.25 x 1.25 dg :: G	0.1 km :: Atmos
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Robrock	1419	BM	:: 100 mb	1/(6 hr)	1 x 1 dg :: G	100 mb :: Cloud
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Murakami	1418	AM	0.2km :: 0.2km	1/day	100 km :: Polar	:: Cloud
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Wielicki	1422	AM	1 km ::	1/day	100 km :: Polar	:: Cloud
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Hansen	1399	AM	0.5 km :: 0.1 km	6/day [d,n]	25-100 km :: G	0.1 km :: Atmos
CERES	TRM,AM,PM Cloud Height, Top	Barkstrom	1429	Hansen	1399	AM	50 m ::	1/wk	500 km :: G	:: Cloud
CERES	TRM,AM,PM Cloud Drop Phase	Barkstrom	1767				90% Conf :: 90% Conf	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	N/A :: Atmos
CERES	TRM,AM,PM Cloud Drop Phase	Barkstrom	1767	Bates	1759	AM		1/day, 1/mo	1 dg :: G	N/A :: Cloud

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument	Platform	Instrument Output Data Product			IDS Input Requirements			Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
		Product Name	T.M	Prod #	Investigator	Prod #	Match Type				
CERES	TRM,AM,PM	Cloud Drop Phase	Barkstrom	1767	Dickinson	3346	AM			<0.5-1 deg :: G	N/A :: Atmos
CERES	TRM,AM,PM	Cloud Drop Phase	Barkstrom	1768	Dickinson	3346	BM	90% Conf :: 90% Conf	6/day [d.n]	25 km :: G	N/A :: Atmos
CERES	TRM,AM,PM	Cloud Drop Phase	Barkstrom	1769	Wielicki	1761	BM	90% Conf :: 90% Conf	6/day [d.n]	25-100 km :: G	N/A :: Atmos
CERES	TRM,AM,PM	Cloud Drop Phase	Barkstrom	1770	Bates	1759	AM	90% Conf :: 90% Conf	1/day, 1/mo	1 dg :: G	N/A :: Cloud
CERES	TRM,AM,PM	Cloud Drop Phase	Barkstrom	1771	Sellers	1984	AM				
CERES	TRM,AM,PM	Cloud Drop Size (Effective Radius)	Barkstrom	1783	Hartmann	1785	AM	0.02 :: 0.02	1/day	10 km :: Ocean	N/A :: Cloud
CERES	TRM,AM,PM	Cloud Drop Size (Effective Radius)	Barkstrom	1784	Bates	1777	BM	30% :: 10%	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	N/A :: Atmos
CERES	TRM,AM,PM	Cloud Drop Size (Effective Radius)	Barkstrom	1785	Dickinson	3347	AM	0-40% :: 5%	1/day, 1/mo	1 dg :: G	N/A :: Cloud
CERES	TRM,AM,PM	Cloud Drop Size (Effective Radius)	Barkstrom	1786	Dickinson	3347	BM	30% :: 10%	6/day [d.n]	25 km :: G	N/A :: Atmos
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1895	Wielicki	1772	BM	30% :: 10%	6/day [d.n]	<0.5-1 deg :: G	N/A :: Atmos
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1896	Bates	1894	BM	75% :: 10%	1/(6 hr)	1.25 x 1.25 dg :: G	N/A :: Atmos
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1897	Hartmann	1919	AM	0.05 :: 0.05	1/day	1 x 1 dg :: G	1 km :: 0-30 km
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1898	Dickinson	3357	BM	75% :: 10%	6/day [d.n]	10 km :: Ocean	Column :: Trop
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1899	Wielicki	1906	BM	20% :: 10%	2/day [d.n]	25 km :: G	1 km :: 0-30 km
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1900	Wielicki	1907	BM	50% :: 10%	6/day [d.n]	12-25 km :: G	1 km :: 0-30 km
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1901	Barron	1902	AM	0.1 :: 0.05	1/day	100 km :: G	1 km :: Cloud
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1902	Bates	1894	AM	75% :: 10%	1/(6 hr)	1 x 1 dg :: G	1 km :: 0-30 km
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1903	Barron	1903	AM	0.1 :: 0.05	1/day	10 km :: R	1 km :: Cloud
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1904	Dickinson	3357	BM	75% :: 10%	1/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	1 km :: Atmos
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1905	Bates	1894	AM	75% :: 10%	1/(6 hr)	<0.5-1 deg :: G	1 km :: Atmos
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1906	Lau	1920	BM	50% :: 10%	1/day [Avg], 1/mo [Avg]	1 x 1 dg :: G	1 km :: 0-30 km
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1907	Sellers	1921	BM	0.05 :: 0.05	1/day	1.25 x 1.25 dg :: G	Column :: Atmos
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1908	Abbott	1918	BM	50% :: 10%	6/day [d.n]	100 km :: G	N/A :: Trop
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1909	Sekooz	1922	BM	10% :: 0.1 kg/m ²	2/day	25 km :: G	Column :: Atmos
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1910	Lau	1920	AM	50% :: 10%	1/(6 hr)	1.25 x 1.25 dg :: G	Column :: Atmos
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1911	Lau	1920	AM	0.05 :: 0.05	1/day	100 km :: G	N/A :: Trop
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1912	Wielicki	2025	BM	2% :: 0.5%		10 dg [Angle] :: G	N/A :: Sfc, Atmos
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1913	Wielicki	2026	BM	2% :: 1%		10 dg [Angle] :: G	N/A :: Sfc, Atmos
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1914	Wielicki	2026	BM	2% :: 1%		10 dg [Angle] :: G	N/A :: Sfc, Atmos
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1915	Sellers	2034	BM	5% :: 1%		10 dg [Angle] :: G	N/A :: Sfc, Atmos
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1916	Wielicki	2044	BM	5% :: 2%		10 dg [Angle] :: G	N/A :: Sfc, Atmos
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1917	Dickinson	3344	BM	5% :: 2%	6/day [d.n]	25 km :: G	N/A :: Atmos
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1918	Wielicki	2061	BM	5% :: 2%	6/day [d.n]	Mod_res :: G	N/A :: Atmos
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1919	Lau	2054	BM	5% :: 5%	2/day	25-100 km :: G	N/A :: Atmos
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1920	Harrie	3436	BM	5-10% :: 2-5%	2/day	50 km :: R	N/A :: Atmos
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1921	Bates	2072	AM	0.05 :: 0.025	2/day [d.n]	5-50 km :: Ocean/R	N/A :: Cloud
CERES	TRM,AM,PM	Cloud Liq_water Content	Barkstrom	1922	Liu	2055	AM			15 x 45 km :: G	N/A :: Cloud

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument	Instrument Output Data Product			IDS Input Requirements		Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover	Vertical Resol :: Cover
	Platform	Product Name	TM	Prod #	Investigator	Prod #			
CERES	TRM,AM,PM	Cloud Cover	Barkstrom	2086	Murakami	2058	AM	10% ::	N/A :: Cloud
					Simard	2056	AM	5% ::	N/A :: Cloud
					Bates	2073	AM	10% ::	1 x 1 dg :: G
					Robrock	2076	AM	0.1 :: 0.1	100 km :: Polar
					Hansen	2052	AM	3% ::	500 km :: G
					Inecka	2053	AM		5 km :: Land/R
					Barnon	2049	AM	5 :: 5	100 km :: G
								5% :: 2%	1.25 x 1.25 dg :: G
					Bates	2073	BM	10% ::	1 x 1 dg :: G
					Sellers	2059	BM	4/day	100 km ::
CERES	TRM,AM,PM	Cloud Cover	Barkstrom	2087	Simard	2056	AM	5% ::	Canada/R
					Hansen	2052	AM	3% ::	500 km :: G
					Barnon	2049	AM	5 :: 5	100 km :: G
								5% :: 2%	1.25 x 1.25 dg :: G
					Barnon	2049	BM	5 :: 5	100 km :: G
					Bates	2074	BM	10% :: 5%	1 dg :: G
					Dickinson	3345	BM		Low_res :: G
					Murakami	2058	BM	10% ::	100 km :: Polar
					Robrock	2076	BM	0.1 :: 0.1	500 km :: G
					Hansen	2052	BM	3% ::	500 km :: G
CERES	TRM,AM,PM	Cloud Cover	Barkstrom	2088	Lin	2055	AM		500 km :: G
					Simard	2056	AM	5% ::	Canada/R
					Bates	2069	AM	5% ::	100 km :: G
					Lau	2070	AM	5% :: 5%	100 km :: G
					Bates	2073	AM	10% ::	1 x 1 dg :: G
								10% :: 5%	1.25 x 1.25 dg :: G
					Hansen	2357	BM		500 km :: G
								10% :: 5%	1.25 dg :: G
					Wielicki	2150	BM	0%clr/25%cid :: 5%clr/10%ci	1.25 dg :: G
					Wielicki	2152	BM	0%clr/25%cid :: 5%clr/10%ci	1.25 dg :: G
CERES	TRM,AM,PM	Radiative Flux Divergence, Clear_sky	Barkstrom	2144				10% :: 5%	1.25 x 1.25 dg :: G
					Sellers	2193	BM	20% :: 20%	100 km :: Land
					Wielicki	2150	AM	0%clr/25%cid :: 5%clr/10%ci	1.25 dg :: G
					Wielicki	2152	AM	0%clr/25%cid :: 5%clr/10%ci	1.25 dg :: G
								25% :: 10%	1.25 x 1.25 dg :: G
					Hansen	2357	BM		500 km :: G
					Moore	2360	AM	10% :: 10%	1 km :: G
								50% :: 10%	1.25 x 1.25 dg :: G
					Sellers	2193	BM	20% :: 20%	100 km :: Land
					Wielicki	2150	BM	0%clr/25%cid :: 5%clr/10%ci	1.25 dg :: G
CERES	TRM,AM,PM	Radiative Flux Divergence, Cloudy_sky	Barkstrom	2145	Wielicki	2152	BM	0%clr/25%cid :: 5%clr/10%ci	1.25 dg :: G
					Wielicki	2152	BM	0%clr/25%cid :: 5%clr/10%ci	1.25 dg :: G
								5 W/m² :: 2 W/m²	1.25 x 1.25 dg :: G
					Brewer	2255	BM		100 km ::
					Brewer	2256	BM		100 km ::
					Dickinson	3375	BM		100 km ::
					Kerr, Sorooshian	2163	AM		100 km ::
									100 km ::
									100 km ::
									100 km ::

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product					IDS Input Requirements		Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.	
Instrument	Platform	Product Name	TM	Prod #	Investigator	Prod # Match Type					
CERES	TRM,AM,PM	Radiative Flux, LW, Down	Barkstrom	2169	Wielicki	2163	BM	7 W/m ² :: 2 W/m ²	6/day [d.n]	1.25 x 1.25 dg :: G	N/A :: Sfc
					Dickinson	3375	BM	7 W/m ² :: 2 W/m ²	6/day [d.n]	1.25 dg :: G	N/A :: Sfc
					Kerr, Sorooshian	2163	AM	10% :: 10%	[diurnal]	500 m :: Land/R	N/A :: Sfc ?
CERES	TRM,AM,PM	Radiative Flux, LW, Down	Barkstrom	2170	Sellers	2164	BM	7 W/m ² :: 2 W/m ²	1/(6 hr)	1.25 x 1.25 dg :: G	N/A :: Sfc
					Dickinson	3375	BM	20% :: 20%	4/day	100 km :: Land	0.5 km ::
					Kerr, Sorooshian	2163	BM	10% :: 10%	[diurnal]	500 m :: Land/R	N/A :: Sfc
CERES	TRM,AM,PM	Radiative Flux, LW, Net	Barkstrom	2180	Wielicki	2175	BM	7 W/m ² :: 2 W/m ²	6/day [d.n]	1.25 x 1.25 dg :: G	N/A :: Sfc
					Dickinson	3376	AM	7 W/m ² :: 2 W/m ²	6/day [d.n]	1.25 dg :: G	N/A :: Sfc
					Murakami	2183	AM	2% ::		<0.5-1 deg :: G	N/A :: Sfc ?
CERES	TRM,AM,PM	Radiative Flux, LW, Net	Barkstrom	2181	Dickinson	3376	AM	7 W/m ² :: 2 W/m ²	1/(6 hr)	1.25 x 1.25 dg :: G	N/A :: Atmos
					Murakami	2183	AM	2% ::		<0.5-1 deg :: G	N/A :: Sfc ?
										N/A :: Atmos	
CERES	TRM,AM,PM	Radiative Flux, LW, Net	Barkstrom	2182	Barron	2185	BM	5 W/m ² :: 2 W/m ²	11/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	N/A :: Sfc
					Brewer	2255	BM	10 :: 5	1/day	100 km :: G	N/A :: Sfc
					Brewer	2256	BM		1/day, 1/week	:: Ocean/L	N/A :: Sfc
CERES	TRM,AM,PM	Radiative Flux, LW, Up	Barkstrom	2200	Dickinson	3376	BM			<0.5-1 deg :: G	N/A :: Sfc ?
					Murakami	2183	BM	2% ::			N/A :: Atmos
					Simard	2137	BM	10% ::			N/A :: Atmos
CERES	TRM,AM,PM	Radiative Flux, LW, Up	Barkstrom	2201	Lau	2154	BM	10W/m ² :: 10%	1/day	500 km :: G	N/A :: Sfc
					Hartmann	2188	AM	5% :: 2%	1/day	<30 km :: Ocean	N/A :: Sfc
					Barron	2189	BM	3 W/m ² :: 1 W/m ²	11/day [Avg], 1/mo [Avg]	1.25 x 1.25 dg :: G	N/A :: TOA
CERES	TRM,AM,PM	Radiative Flux, LW, Up	Barkstrom	2202	Murakami	2395	BM	10 :: 5	1/day	100 km :: G	N/A :: TOA
					Dickinson	3377	BM	10% ::		<0.5-1 deg :: G	N/A :: TOA
					Baca	2191	BM		2/day [d.n]	50 km :: G	N/A :: TOA
CERES	TRM,AM,PM	Radiative Flux, LW, Up	Barkstrom	2203	Wielicki	2195	BM	7 W/m ² :: <7 W/m ²	6/day [d.n]	1.25 x 1.25 dg :: G	N/A :: Sfc
					Dickinson	3378	BM	7 W/m ² :: <7 W/m ²	6/day [d.n]	1.25 dg :: G	N/A :: Sfc
					Baca	2191	BM	20% :: 20%	2/day [d.n]	<0.5-1 deg :: G	N/A :: Sfc ?
CERES	TRM,AM,PM	Radiative Flux, LW, Up	Barkstrom	2204	Sellers	2193	BM	5 W/m ² :: <5 W/m ²	4/day	100 km :: Land	0.5 km ::
					Barron	2185	BM	10 :: 5	1/day	100 km :: G	N/A :: Sfc
					Brewer	2255	BM		1/day, 1/week	:: Ocean/L	N/A :: Sfc
CERES	TRM,AM,PM	Radiative Flux, LW, Up	Barkstrom	2205	Brewer	2256	BM		1/day, 1/week	:: Ocean	N/A :: Sfc
					Hartmann	2188	AM	5% :: 2%	1/day	<30 km :: Ocean	N/A :: Sfc
					Baca	2191	BM	5 W/m ² :: 2 W/m ²	1/(6 hr)	1.25 x 1.25 dg :: G	N/A :: TOA
CERES	TRM,AM,PM	Radiative Flux, LW, Up	Barkstrom	2206	Murakami	2395	AM	10% ::	2/day [d.n]	50 km :: G	N/A :: TOA
										N/A :: TOA	
					Wielicki	2194	BM	5 W/m ² :: 2 W/m ²	6/day [d.n]	25 km :: G	N/A :: TOA
CERES	TRM,AM,PM	Radiative Flux, LW, Up	Barkstrom	2207	Hartmann	2190	BM	5 W/m ² :: 2 W/m ²	6/day [d.n]	1.25 dg :: G	N/A :: TOA
					Srokosz	2385	BM	5% :: 2%	1/day	<30 km :: Ocean	N/A :: TOA
					Murakami	2395	AM	10W/m ² :: 1W/m ²	2/day	10 km :: Ocean [South Atlan]	N/A :: TOA

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument			Instrument Output Data Product			IDS Input Requirements		Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type	Abs :: Rel				
CERES	TRM,AM,PM Radiative Flux, SW, Down	Barkstrom	2221	Wielicki	2218	BM	15 W/m ² :: 2 W/m ²	3/day [d]	1.25 dg :: G	N/A :: Sfc	
				Kerr, Sorooshian	2142	BM	15 W/m ² :: 2 W/m ²	3/day [d]	1.25 dg :: G	N/A :: Sfc	
				Dickinson	3384	BM	1 W/m ² :: 1 W/m ²	1/hr	8 km :: Land/R	N/A :: TOA	
				Sellers	2217	BM	20% :: 20%	1/hr	100 km :: Land	100 km :: Land	
				Kerr, Sorooshian	2216	AM	10% :: 10%	[diurnal]	500 m :: Land/R	500 m :: Land	
				Srokosz	2400	AM	10 W/m ² :: 1 W/m ²	2/day	10 km :: Ocean [South Atlan]	10 km :: Ocean [South Atlan]	
				Barnon	2237	BM	10 W/m ² :: 2 W/m ²	1/day	100 km :: G	100 km :: G	
				Brewer	1492	BM	1 W/m ² :: 1 W/m ²	1/day, 1/week	8 km :: Land/R	8 km :: Land/R	
				Kerr, Sorooshian	2142	BM	1 W/m ² :: 1 W/m ²	1/hr	<0.5-1 deg :: G	<0.5-1 deg :: G	
				Dickinson	3384	BM	10 W/m ² :: 10%	1/day	500 km :: G	500 km :: G	
CERES	TRM,AM,PM Radiative Flux, SW, Down	Barkstrom	2222	Brewer	1493	BM	10 W/m ² :: 10%	1/day, 1/week	500 km :: G	500 km :: G	
				Kerr, Sorooshian	2216	AM	10% :: 10%	[diurnal]	500 m :: Land/R	500 m :: Land/R	
				Kerr, Sorooshian	2142	BM	15 W/m ² :: 2 W/m ²	1/(6 hr)	1.25 x 1.25 dg :: G	1.25 x 1.25 dg :: G	
				Dickinson	3384	BM	1 W/m ² :: 1 W/m ²	1/hr	8 km :: Land/R	8 km :: Land/R	
				Kerr, Sorooshian	2216	BM	10% :: 10%	[diurnal]	500 m :: Land/R	500 m :: Land/R	
				Richey, Batista	2141	BM	10% :: 10%	2/day	Land/R	Land/R	
				Richey, Batista	2141	BM	20% :: 20%	2/day	Land/R	Land/R	
				Sellers	2217	BM	20% :: 20%	1/hr	100 km :: Land	100 km :: Land	
				Wielicki	2218	AM	15 W/m ² :: 2 W/m ²	3/day [d]	1.25 dg :: G	1.25 dg :: G	
				Dickinson	3379	AM	15 W/m ² :: 2 W/m ²	3/day [d]	1.25 dg :: G	1.25 dg :: G	
CERES	TRM,AM,PM Radiative Flux, SW, Net	Barkstrom	2229	Wielicki	2226	BM	15 W/m ² :: 2 W/m ²	3/day [d]	1.25 dg :: G	N/A :: Sfc	
				Dickinson	3379	AM	15 W/m ² :: 2 W/m ²	3/day [d]	1.25 dg :: G	N/A :: Sfc	
				Hartmann	2214	AM	0.5% :: 0.5%	1/day	<0.5-1 deg :: G	N/A :: Sfc	
				Srokosz	2400	AM	10 W/m ² :: 1 W/m ²	2/day	20 km :: G	N/A :: Sfc	
				Barnon	2237	BM	10 W/m ² :: 2 W/m ²	1/day	10 km :: Ocean [South Atlan]	10 km :: Ocean [South Atlan]	
				Dickinson	3379	BM	10 :: 5	1/day	100 km :: G	N/A :: Sfc	
				Murakami	2234	BM	2% ::		<0.5-1 deg :: G	N/A :: Sfc	
				Sinard	2137	BM	10% ::		Canada/R	N/A :: Atmos	
				Lau	2215	BM	10 W/m ² :: 10%	1/day	500 km :: G	N/A :: Sfc	
				Hartmann	2214	AM	0.5% :: 0.5%	1/day	20 km :: G	N/A :: Sfc	
CERES	TRM,AM,PM Radiative Flux, SW, Net	Barkstrom	2231	Dickinson	3379	AM	15 W/m ² :: 2 W/m ²	1/(6 hr)	1.25 x 1.25 dg :: G	N/A :: Sfc	
				Wielicki	2226	AM	15 W/m ² :: 2 W/m ²	3/day [d]	<0.5-1 deg :: G	N/A :: Sfc	
				Hartmann	2214	AM	0.5% :: 0.5%	1/day	1.25 dg :: G	N/A :: Sfc	
				Wielicki	2241	BM	12 W/m ² :: 2 W/m ²	3/day [d]	20 km :: G	N/A :: Sfc	
				Wielicki	2241	BM	10 W/m ² :: 2 W/m ²	3/day [d]	1.25 dg :: G	N/A :: TOA	
				Wielicki	2242	BM	15 W/m ² :: 2 W/m ²	3/day [d]	1.25 dg :: G	N/A :: Sfc	
				Kerr, Sorooshian	2240	AM \$	15% :: 15%	3/day [d]	1.25 dg :: G	N/A :: Sfc	
				Srokosz	2400	AM	10 W/m ² :: 1 W/m ²	[diurnal]	500 m :: Land/R	N/A :: Sfc	
				Wielicki	2241	BM	10 W/m ² :: 2 W/m ²	2/day	10 km :: Ocean [South Atlan]	N/A :: Sfc	
				Barnon	2237	BM	10 W/m ² :: 2 W/m ²	1/day	1.25 x 1.25 dg :: G	N/A :: Sfc	
CERES	TRM,AM,PM Radiative Flux, SW, Up	Barkstrom	2246	Brewer	1492	BM	10 :: 5	1/day, 1/week	100 km :: G	100 km :: G	
									100 km :: G	100 km :: G	
									100 km :: G	100 km :: G	
									100 km :: G	100 km :: G	
									100 km :: G	100 km :: G	
									100 km :: G	100 km :: G	
									100 km :: G	100 km :: G	
									100 km :: G	100 km :: G	
									100 km :: G	100 km :: G	
									100 km :: G	100 km :: G	
CERES	TRM,AM,PM Radiative Flux, SW, Up	Barkstrom	2247	Wielicki	2241	BM	12 W/m ² :: 2 W/m ²	3/day [d]	1.25 dg :: G	N/A :: TOA	
				Wielicki	2242	BM	15 W/m ² :: 2 W/m ²	3/day [d]	1.25 dg :: G	N/A :: Sfc	
				Kerr, Sorooshian	2240	AM \$	15% :: 15%	3/day [d]	1.25 dg :: G	N/A :: Sfc	
				Srokosz	2400	AM	10 W/m ² :: 1 W/m ²	[diurnal]	500 m :: Land/R	N/A :: Sfc	
				Wielicki	2241	BM	10 W/m ² :: 2 W/m ²	2/day	10 km :: Ocean [South Atlan]	N/A :: Sfc	
				Barnon	2237	BM	10 W/m ² :: 2 W/m ²	1/day	1.25 x 1.25 dg :: G	N/A :: Sfc	
				Brewer	1492	BM	10 :: 5	1/day, 1/week	100 km :: G	N/A :: Sfc	
									100 km :: G	N/A :: Sfc	
									100 km :: G	N/A :: Sfc	
									100 km :: G	N/A :: Sfc	

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument			Instrument Output Data Product		IDS Input Requirements		Investigator	Prod #	Match Type	Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Platform	Product Name	TM	Platform	Product Name	Prod #	Match Type							
CERES	TRM,AM,PM Radiative Flux, SW, Up	Barkstrom	2248	Barkstrom	2248	BM	Brewer	1493	BM	10W/m ² :: 10%	1/day, 1/beam	500 km :: O	N/A :: Sfc
							Lau	2215	BM		2/day	Land/R	N/A :: TOA
CERES	TRM,AM,PM Radiative Flux, SW, Up	Barkstrom	2249	Barkstrom	2249	BM	Richy, Batista	2141	BM	12 W/m ² :: 2 W/m ²	1/(6 hr)	1.25 x 1.25 deg :: G	N/A :: TOA
CERES	TRM,AM,PM Radiative Flux, SW, Up	Barkstrom	2250	Barkstrom	2250	AM \$	Richy, Batista	2141	BM	15 W/m ² :: 2 W/m ²	2/day	Land/R	N/A :: Sfc
CERES	TRM,AM,PM Radiative Flux, SW, Up	Barkstrom	2251	Barkstrom	2251	AM \$	Kerr, Sorooshian	2240	AM \$	15% :: 15%	[diurnal]	500 m :: Land/R	N/A :: TOA
CERES	TRM,AM,PM Cloud Optical Depth, LW	Barkstrom	2316	Barkstrom	2316	BM	Barron	2239	BM	7 W/m ² :: 2 W/m ²	1/day	100 km :: O	N/A :: TOA
							Dickinson	3380	BM	10 :: 5	1/day	<0.5-1 deg :: G	N/A :: Sfc
CERES	TRM,AM,PM Cloud Optical Depth, LW	Barkstrom	2317	Barkstrom	2317	BM	Herman	2213	BM	0.5% :: 0.5%	1/day	20 km :: G	N/A :: TOA
							Dickinson	3381	BM	25% :: 10%	6/day [d,n]	25 km :: G	N/A :: Atmos
CERES	TRM,AM,PM Cloud Optical Depth, LW	Barkstrom	2318	Barkstrom	2318	AM	Wielicki	2314	BM	25% :: 10%	6/day [d,n]	<0.5-1 deg :: G	N/A :: Atmos
							Dickinson	3383	AM	10-20% :: 5-10%	2/day-1/day	<0.5-1 deg :: G	N/A :: Atmos
CERES	TRM,AM,PM Cloud Optical Depth, LW	Barkstrom	2319	Barkstrom	2319	AM	Harris	3445	AM	0.1 :: 0.1	1/day	100 km :: Polar	N/A :: Cloud
							Robrock	2544	AM	10% :: 5%	1/day	1.25 deg :: G	N/A :: Atmos
CERES	TRM,AM,PM Cloud Optical Depth, LW	Barkstrom	2320	Barkstrom	2320	AM	Barron	2301	BM	3% :: 3%	1/day	100 km :: Ocean	N/A :: Cloud
							Bates	2305	AM	20% :: 10%	1/day, 1/mo	1 deg :: G	N/A :: Cloud
CERES	TRM,AM,PM Cloud Optical Depth, LW	Barkstrom	2321	Barkstrom	2321	AM	Dickinson	3381	AM	0.1 :: 0.1	1/day	<0.5-1 deg :: G	N/A :: Cloud
							Robrock	2544	AM	25% :: 10%	3/day [d]	25 km :: G	N/A :: Atmos
CERES	TRM,AM,PM Cloud Optical Depth, LW	Barkstrom	2322	Barkstrom	2322	AM	Dickinson	3382	BM	25% :: 10%	3/day [d]	<0.5-1 deg :: G	N/A :: Atmos
							Dickinson	3383	BM	25% :: 10%	3/day [d]	25-100 km :: G	N/A :: Atmos
CERES	TRM,AM,PM Cloud Optical Depth, LW	Barkstrom	2323	Barkstrom	2323	AM	Wielicki	2319	BM	10-20% :: 5-10%	2/day-1/day	<0.5-1 deg :: G	N/A :: Atmos
							Harris	3445	AM	3% :: 3%	1/day	5-50 km :: Ocean/R	N/A :: Cloud
CERES	TRM,AM,PM Cloud Optical Depth, LW	Barkstrom	2324	Barkstrom	2324	AM	Barron	2301	AM	0.1 :: 0.1	1/day	100 km :: Ocean	N/A :: Cloud
							Robrock	2544	AM	10% :: 5%	1/day	100 km :: Polar	N/A :: Cloud
CERES	TRM,AM,PM Cloud Optical Depth, LW	Barkstrom	2325	Barkstrom	2325	AM	Barron	2301	BM	3% :: 3%	1/day	1.25 deg :: G	N/A :: Atmos
							Bates	2305	AM	20% :: 10%	1/day, 1/mo	1 deg :: G	N/A :: Cloud
CERES	TRM,AM,PM Cloud Optical Depth, LW	Barkstrom	2326	Barkstrom	2326	AM	Dickinson	3382	AM	0.1 :: 0.1	1/day	<0.5-1 deg :: G	N/A :: Cloud
							Dickinson	3383	AM	0.1 :: 0.1	1/day	<0.5-1 deg :: G	N/A :: Cloud
CERES	TRM,AM,PM Cloud Optical Depth, LW	Barkstrom	2327	Barkstrom	2327	AM	Wielicki	2319	BM	25% :: 10%	3/day [d]	100 km :: Polar	N/A :: Cloud
							Robrock	2544	AM	25% :: 10%	3/day [d]	25-100 km :: G	N/A :: Atmos
CERES	TRM,AM,PM Cloud Optical Depth, LW	Barkstrom	2328	Barkstrom	2328	AM	Wielicki	2319	BM	SW 2% LW 1% :: 0.005	6/day [d,n]	25 km :: G	N/A :: N/A
							Robrock	2544	AM	W2% LW 1% :: SW 2% LW 1%	6/day [d,n]	25 km :: R	N/A :: Atmos
CERES	TRM,AM,PM Cloud Optical Depth, LW	Barkstrom	2329	Barkstrom	2329	AM	Wielicki	2319	BM	5% :: 1%	TBD	10 deg [Angle] :: G	N/A :: Cloud
							Robrock	2544	AM	5% :: 2%	TBD	10 deg [Angle] :: G	N/A :: Cloud

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument		Instrument Output Data Product			IDS Input Requirements		Accuracy		Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type	Abs :: Rel							
EOSP	AERO.AM2 Cloud Pressure, Top	Travis	1530	Dickinson	3330	AM	30 mb :: 30 mb		1/day [d]		40 km :: G		30 mb :: Cloud	
				Munkami	1418	AM	1 km ::				<0.5-1 deg :: G		:: Cloud	
				Robrock	1419	AM	0.2km :: 0.2km		1/day		100 km :: Polar		:: Cloud	
				Barron	1412	AM	100 m :: 25 m		1/day		100 km :: G		100 m :: Cloud	
				Hansen	1399	AM	50 m ::		1/wk		500 km :: G		:: Cloud	
				Bates	1527	AM	50 mb :: 20 mb		2/day		5 km :: G		N/A :: Cloud	
							:: 95% Corr		1/day [d]		100 km :: G		N/A :: Cloud	
				Bates	1759	AM			1/day, 1/mo		1 dg :: G		N/A :: Cloud	
				Dickinson	3346	AM					<0.5-1 deg :: G			
				Wielicki	1761	AM	90% Conf :: 90% Conf		6/day [d,n]		25-100 km :: G		N/A :: Atmos	
EOSP	AERO.AM2 Cloud Drop Size	Travis	1774	Dickinson	3347	BM	25% :: 25%		1/day [d]		100 km :: G		N/A :: Cloud	
				Bates	1777	AM	0-40% :: 5%		1/day, 1/mo		1 dg :: G		N/A :: Cloud	
EOSP	AERO.AM2 Aerosol Optical Depth	Travis	2297				0.2 :: 10%		1/day [d]		40 km :: G		Column :: Atmos	
				Sellers	2288	BM	::							
				Isacks	2326	BM	5-15% :: 1-10%		1/wk		10-50 km :: Land/R		Column :: Atmos	
				Pyle	1003	BM-			2/day		:: G		:: Strat	
				Wielicki	2289	BM	0.10 :: 0.10		1/day		1.25 dg :: G		N/A :: Atmos	
				Hansen	1001	AM	tau=0.02 ::		1/wk		500 km :: G		:: Trop	
				Hartmann	1002	AM	tau=0.02 ::		1/day		20 km :: G		3 km :: 0-15 km	
							20% :: 10%		1/day [d]		40 km :: G		Column :: Cloud	
				Robrock	2544	BM	0.1 :: 0.1		1/day		100 km :: Polar		N/A :: Cloud	
				Isacks	2326	BM	5-15% :: 1-10%		1/wk		10-50 km :: Land/R		Column :: Atmos	
EOSP	AERO.AM2 Cloud Optical Depth	Travis	2313	Bates	2304	BM			1/day		15 x 45 km :: G		N/A :: Cloud	
				Dickinson	3382	AM					<0.5-1 deg :: G			
				Harris	3445	AM	10-20% :: 5-10%		2/day-1/day		5-50 km :: Ocean/R			
				Barron	2301	AM	3% :: 3%		1/day		100 km :: Ocean		N/A :: Cloud	
				Bates	2305	AM	20% :: 10%		1/day, 1/mo		1 dg :: G		N/A :: Cloud	
				Kerr, Sorooshian	2325	AM	10% :: 10%		1/5-16 day)		10 km :: Land/R		:: Atmos	
							5% ::		2 day [d]		10 km :: G		NA :: Cloud, Sfc	
				Wielicki	3615	AM	5% :: 2%		TBD		10 dg [Angle] :: G		N/A :: Cld	
				Robrock	2012	AM \$	0.05 :: 0.05		1/3 day		25 km :: Polar		N/A :: Sfc	
							1 K :: 1 K		700 red/day		1-200 km :: G		1 km :: 5-50 km	
GGI	ALT Temperature Profile	Melbourne	1603	Bates	1569	AM \$:: 1-2 K				1.8 x .16 dg :: G		3 km :: 20-60 km	
				Hansen	1573	AM	0.3 C ::		1/wk		500 km :: G		:: Strat	
GGI	ALT Temperature Profile	Melbourne	1606	Schocherl	1582	AM	2 K :: 1 K		1/day		2 x 2 dg :: G		2 km :: Atmos	
							1 K :: 1 K		700 red/day		1-200 km :: G		1 km :: 2-550-60 km	
GLRS-A	ALT Ice Sheet Displacement	Bentley	2897	Bates	1569	AM \$:: 1-2 K				1.8 x .16 dg :: G		3 km :: 20-60 km	
							10 mm/day :: 10 mm/day		1/mo		N/A :: Land/Cryo		N/A :: Sfc	
GLRS-A	ALT Ice Sheet Elevation	Bentley	2912	Barron	2929	BM	::				:: Land/Cryo		N/A :: Sfc	
				Simard	2896	BM	10 cm ::		1/yr, 1/dec		:: Canada/R		N/A :: Sfc	
GLRS-A	ALT Ice Sheet Elevation	Bentley	2912				100 mm :: 100 mm		1/mo		75 m :: Land/Cryo		N/A :: Sfc	
				Simard	2909	BM	100 mm ::		1/3 mo		10 km :: Land/R		N/A :: Sfc	
GLRS-A	ALT Ice Sheet Elevation	Bentley	2912	Barron	3053	BM-	100 ::		1/3 mo		10 km :: Land/Cryo		:: Sfc	
				Barron	3054	BM-	100 ::		1/3 mo		100 km :: Land/Cryo		30 m :: Sfc	
GLRS-A	ALT Ice Sheet Elevation	Bentley	2912	Simard	3055	BM-	100 mm ::		1/3 mo		10 km :: Land/R		N/A :: Sfc	
				Simard	3056	BM-	100 mm ::		1/3 mo		100 km :: Land		N/A :: Sfc	

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product					IDS Input Requirements			Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Instrument	Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type	Abs :: Rel			
GLRS-A	ALT	Ice Sheet Elevation	Bentley	2912	Iacoca	2908	BM	0.1 ::	2yr	10 m :: Land/Cryo	N/A :: Sfc
					Barron	2906	AM	100 ::	1/(3 mo)	10 km :: Land/Cryo	:: Sfc
GLRS-A	ALT	Topographic Elevation-Change Rate, Land & Cohen, Schutz et al	2831					5 mm/yr ::	1/yr	100-500 km :: Land/R	:: Sfc
					Mouginis-Mark	3278	BM	10 m(ver) ::	1/vent	30 m :: Land/L	N/A :: Sfc
GLRS-A	ALT	Landform Morphology	Schutz et al	2858						30 m :: Land/L	N/A :: Sfc
					Mouginis-Mark	3284	AM		4/yr	30 m :: Land/L	N/A :: Sfc
								100-500mm ::	1/mk, 1/yr	0.1-10 km :: Land	100-500 mm :: Sfc
					Iacoca	2851	BM		1/misison	15-30 m :: Land/R	N/A :: Sfc
					Mouginis-Mark	3284	BM		4/yr	30 m :: Land/L	N/A :: Sfc
GLRS-A	ALT	Volcano Deformation(Inflation-Deflation)	Schutz et al	3271				20% :: 20%	1/wk	1-25 km :: Land	N/A :: Sfc
					Moore	2915	AM \$	5/yr-100/d ::	1/day, 1/yr	1 km :: Land/L	:: Sfc
					Mouginis-Mark	3269	BM	1 cm(ver) ::	1/day	cm [?] :: [30 km*2/10]	N/A :: Sfc
GLRS-A	ALT	Cloud Height	Spiethorne	1400				1-5 (ver) ::	2/day [d,n]	30 m :: Land/L	N/A :: Sfc
								75 m ::	1/(2-16 day)	2-10 km :: G	75 m ::
					Bates	1406	BM	50 m ::	2/day	50 km :: G	N/A :: Cloud
					Bates	1401	AM	500 m ::	2/day	50 km :: G	N/A :: Cloud
					Lau	1402	AM	100 m ::	2/day	50 km :: G	N/A :: Atmos
					Bates	2069	AM \$		1/day	100 km :: G	0.5 km :: Trop
					Bates	2072	AM \$	0.05 :: 0.025	2/day [d,n]	15 x 45 km :: G	N/A :: Cloud
					Lau	2070	AM \$	5% :: 5%	1/day	100 km :: G	N/A :: Cloud
GLRS-A	ALT	Cloud Structure, Cirrus	Spiethorne	1410				0.2 ::	1/(2-16 day)	1-10 km :: G	75 m ::
									1/day	100 km :: G	0.5 km :: Trop
					Bates	2069	AM \$	5% :: 5%	1/day	100 km :: G	N/A ::
					Lau	2070	AM \$	0.05 :: 0.025	2/day [d,n]	15 x 45 km :: G	N/A :: Cloud
					Bates	2072	AM \$	0.05 :: 0.025	2/day [d,n]	15 x 45 km :: G	N/A :: Cloud
					Bates	1401	AM	500 m ::	2/day	50 km :: G	N/A :: Cloud
					Lau	1402	AM	100 m ::	2/day	50 km :: G	N/A :: Atmos
GLRS-A	ALT	Cloud Cover	Spiethorne	2078				1% ::	1/(2-16 day)	10-200 km :: G	N/A ::
									1/wk	500 km :: G	:: Cloud
					Hansen	2052	AM	3% ::	2/day	50 km :: R	N/A :: Atmos
					Lau	2054	AM	5% :: 5%		:: Ocean	N/A :: Cloud
					Liu	2055	AM				N/A :: Cloud
					Murkenni	2058	AM	10% ::			N/A :: Cloud
					Simard	2056	AM	5% ::			N/A :: Cloud
					Harris	3436	AM	5-10% :: 2-5%	2/day	5-50 km :: Ocean/R	N/A :: Cloud
					Bates	2069	AM \$		1/day	100 km :: G	0.5 km :: Trop
					Lau	2070	AM \$	5% :: 5%	1/day	100 km :: G	N/A ::
					Barron	2049	AM	5 :: 5	1/day	100 km :: G	N/A :: Cloud
					Bates	2072	AM \$	0.05 :: 0.025	2/day [d,n]	15 x 45 km :: G	N/A :: Cloud
					Kerr, Sorooshian	2075	AM	5% :: 5%	1/day	10 km :: Land/R	N/A :: Cloud
					Barron	2050	AM	5 :: 5	1/day	10 km :: R	N/A :: Cloud
GLRS-A	ALT	Cloud Optical Depth, Cirrus	Spiethorne	2300				20% ::	1/(2-16 day)	1-100 km :: G	
								25% :: 0.25	1/day	10 km :: Ocean	N/A :: Cloud
					Hertzmann	2306	AM	0.10 :: 0.10	1/day	1.25 dg :: G	N/A :: Atmos
GLRS-A	ALT	Aerosol Layer Boundary Height	Spiethorne et al	1014				150 m ::	1/(2-16 day)	2-200 km :: G	75 m :: Atmos
								75 m ::		2-200 km :: G	75 m :: Atmos
					Bates	1013	BM	75 m ::		200 km :: G	75 m :: Trop
					Bates	1642	BM	75 m ::	1/vent, 1/mo	2 km :: Land/R	75 m :: Atmos
					Iacoca	1015	BM	75 m ::			
					Sellers	1004	AM				
					Mouginis-Mark	3285	AM	200m(ver) ::	1/day	1 km :: Land/R	N/A :: Plume col

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product				IDS Input Requirements			Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Instrument	Platform	Product Name	TM	Prod #	Investigator	Prod # Match Type				
GLRS-A	ALT	Cloud Height, Base	Spinthorne et al	1389	Kerr, Sorooshian	1385	75 m :: 200m :: 200m	1/(2-16 day)	2-100 km :: G	75 m :: Cloud
					Bates	1383	:: 100 mb	1/hr	1 km :: Land	100 mb :: Trop
					Wielicki	1387	0.1 km :: 0.1 km	1/(16 day)	25 km :: G	100 mb :: Cloud
							150 m ::	1/(2-16 day)	0.2 km :: R	0.1 km :: Atmos
GLRS-A	ALT	Cloud Height, PSC	Spinthorne et al	1403	Pyle	1404		2/day	2-200 km :: Polar	75 m :: Strat
					Grose	3307	20% :: 10%	2/day	15 x 4 dg :: G	2 km :: Strat
					Wielicki	1421	75 m ::	1/(2-16 day)	200 m :: G	75 m :: Cloud
					Barnon	1413	0.1 km :: 0.1 km	1/(16 day)	0.2 km :: R	0.1 km :: Atmos
GLRS-A	ALT	PBL Height	Spinthorne et al	1514	Kerr, Sorooshian	1417	100 m :: 25 m	1/day	10 km :: R	100 m :: Cloud
					Barnon	1414	:: 0.5 km	1/hr	1 km :: Land/R	:: Cloud
							100 m :: 25 m	1/day	30 m :: L	100 m :: Cloud
					Bates	1512	150 m ::	1/(2-16 day)	2-200 km :: G	75 m :: Trop
GLRS-A	ALT	Aerosol Optical Depth	Spinthorne et al	2291	Dickinson	3329	75 m ::		2-200 km :: G	75 m :: Trop
					Mouginis-Mark	3302		1/day	30 m :: Land/R	N/A :: Plume_col
					Sellers	1513				
					Barnon	1511	75 m ::	1/day	100 km :: G	100 m :: Mixed_1yr
GLRS-A	ALT	Cloud Optical Depth	Spinthorne et al	2308	Barnon	1510	75 m ::	1/day	10 km :: R	100 m :: Mixed_1yr
							20% ::	1/(2-16 day)	2-200 km :: G	N/A :: Atmos
					Hansen	1001	tau=0.02 ::	1/wk	500 km :: G	:: Trop
					Isacks	2326	5-15% :: 1-10%	1/wk	10-50 km :: Land/R	Column :: Atmos
HIRDLS	CHEM	CFC-12(CF2Cl2) Conc	Barnett, Gille	1047	Murkani	2377	5-10% ::	1/wk	:: G	N/A :: Atmos
					Hansen	2287	tau=0.02 ::	1/wk	500 km :: G	:: Strat
					Sellers	2288	::			
					Dickinson	3382	0.1 ::		2-200 km :: G	N/A :: Cloud
HIRDLS	CHEM	CFC-11(CFCl3) Conc	Barnett, Gille	1055	Bates	2304		1/day	<0.5-1 deg :: G	N/A :: Cloud
							5-10% :: 1-10%	2/day [d,n]	15 x 45 km :: G	1 km :: 7-30 km
					Murkani	1374	20% ::		4 x 4 dg :: G	N/A :: TOA
					Schoeberl	1044	15% :: 10	1/day	2 x 3 dg :: G	1.5 km :: Strat
HIRDLS	CHEM	CH4 Conc	Barnett, Gille	1085	Hansen	1057	15% :: 5%	1/wk	500 km :: G	3 km :: Strat
					Grose	1042	15% :: 5%	1/wk	30 x 4 dg :: G	3 km :: Strat
					Pyle	1043	15% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
							5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-30 km
HIRDLS	CHEM	CH4 Conc	Barnett, Gille	1085	Murkani	1374	20% ::		4 x 4 dg :: G	N/A :: TOA
					Schoeberl	1052	15% :: 10	1/day	2 x 3 dg :: G	1.5 km :: Strat
					Hansen	1057	15% :: 5%	1/wk	500 km :: G	3 km :: Strat
					Grose	1050	15% :: 5%	1/wk	30 x 4 dg :: G	3 km :: Strat
HIRDLS	CHEM	CH4 Conc	Barnett, Gille	1085	Pyle	1051	15% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
							5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-30 km
					Murkani	1374	20% ::		4 x 4 dg :: G	N/A :: TOA
					Grose	1074	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
HIRDLS	CHEM	CH4 Conc	Barnett, Gille	1085	Schoeberl	1078	15% :: 0.05	1/day	2 x 3 dg :: G	1.5 km :: Strat
					Pyle	1077	10% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
					Hansen	1372	2% ::	1/wk	500 km :: G	3 km :: Strat
					Hansen	1075	0.10% ::	1/wk	500 km :: Wetlands	3 km :: Trop
HIRDLS	CHEM	CH4 Conc	Barnett, Gille	1085	Hansen	1076		1/wk	500 km :: G	3 km :: Trop

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product													
Instrument	Platform	Product Name	TM	Prod #	IDS Input Requirements				Accuracy	Temporal	Horizontal	Vertical	
HIRDLS	CHEM	HN03 Conc	Barnett, Gille	1202	Investigator	Prod #	Match Type	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.		
					Grose	1198	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 10-40 km		
					Pyle	1210	BM	20% :: 5%	2/day	30 x 10 dg :: G	3 km :: Mid-atmos		
					Pyle	1199	BM	25% :: 10%	2/day	15 x 4 km :: G	3 km :: Strat		
					Schoeberl	1200	BM	15% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat		
								15% :: 0.1	1/day	2 x 3 dg :: G	2 km :: Strat		
HIRDLS	CHEM	N2O Conc	Barnett, Gille	1239	Murakami	1374	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-60 km		
					Hansen	1230	BM	20% ::			N/A :: TOA		
					Grose	1229	BM	15% :: 5%	1/wk	500 km :: G	:: Trop		
					Schoeberl	1232	BM	15% :: 10	1/day	30 x 4 dg :: G	3 km :: Mid-atmos		
					Pyle	1231	BM	15% :: 5%	1/day	2 x 3 dg :: G	2 km :: Strat		
HIRDLS	CHEM	N2O5 Conc	Barnett, Gille	1254	Schoeberl	1252	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 15-45 km		
					Grose	1250	BM	15% :: 20%	1/day	8 x 10 dg :: G	3 km :: Strat		
					Pyle	1251	BM	20% :: 10%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos		
								20% :: 10%	2/day	15 x 4 km :: G	3 km :: Strat		
					Grose	1269	BM	5-10% :: 3-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 10-55 km		
HIRDLS	CHEM	NO2 Conc	Barnett, Gille	1273	Pyle	1270	BM	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos		
					Schoeberl	1271	BM	15% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat		
								10% ::	1/day	4 x 5 dg :: G	2 km :: Mid-atmos		
					Bates	1305	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-80 km		
					Murakami	1310	BM	5-10% :: 1-5%	2/day	4 x 4 dg :: G	1-1.5 km :: 10-80 km		
HIRDLS	CHEM	O3 Conc	Barnett, Gille	1318	Schoeberl	1313	BM	10% ::			N/A :: TOA		
					Grose	1306	BM	10% :: 5%	1/day	2 x 3 dg :: G	1.5 km :: Mid-atmos		
					Pyle	1311	BM	2% 5% :: 2%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos		
					Schoeberl	1312	BM	5% :: 2%	2/day	15 x 4 km :: G	3 km :: Strat		
					Hansen	1307	BM	10% :: 10%	1/day	4 x 5 dg :: G	2.5 km :: Trop		
HIRDLS	CHEM	Cloud Height, PSC	Barnett, Gille	1408	Moore	1309	AM	3% ::	1/wk	500 km :: G	:: Atmos		
								25% :: 10%	1/day	100 km :: G	:: Atmos		
					Pyle	1404	BM	0.4 km :: 0.4 km	2/day [d,n]	4 x 4 dg :: G	0.4 km :: Strat		
					Grose	3307	BM	20% :: 10%	2/day	15 x 4 dg :: G	2 km :: Strat		
								0.04m/km :: 0.04m/km	2/day [d,n]	4 x 4 dg :: G	1 km :: 15-80 km		
HIRDLS	CHEM	Geopotential Height-Gradient	Barnett, Gille	1500	Bates	1499	BM	0.04m/km ::	2/day	4 x 4 dg :: G	1-1.5 km :: Atmos		
					Grose	1516	BM	0.1% :: 0.1%	2/day [d,n]	4 x 4 dg :: G	0.2 km :: 7-80 km		
					Kerr, Sorooshian	1518	BM	0.05 :: 2%	2/day	15 x 4 dg :: G	3 km :: Mid-atmos		
								5% :: 5%	1/hr	25 km :: Land	3 km :: Trop		
								5-10% :: 5-10%	2/day [d,n]	4 x 4 dg :: G	0.4 km :: Trop		
HIRDLS	CHEM	Cloud Pressure, Top	Barnett, Gille	1531	Dickinson	3330	AM			<0.5-1 deg :: G			
					Hansen	1399	AM	50 m ::	1/wk	500 km :: G	:: Cloud		
					Murakami	1418	AM	1 km ::			:: Cloud		
								1K,2K>50km :: 0.1K,1K>50km	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-80 km		
					Bates	1570	BM	1K,2K>50km :: 3,1K>80km	2/day	4 x 4 dg :: G	1-1.5 km :: 10-80 km		
HIRDLS	CHEM	Temperature Profile	Barnett, Gille	1608	Hansen	1573	BM	0.3 C ::	1/wk	500 km :: G	:: Strat		
					Grose	1572	BM	2 K :: 0.5 K	2/day	15 x 4 dg :: G	2 km :: Mid-atmos		
					Schoeberl	1582	BM	2 K :: 1 K	1/day	2 x 2 dg :: G	2 km :: Atmos		
					Bates	1569	AM \$	1-2 K		1.8 x .16 dg :: G	3 km :: 20-60 km		
					Kerr, Sorooshian	1577	AM	1 K :: 1 K	2/day	50 km :: Land	1 km :: Atmos		

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product					IDS Input Requirements				Accuracy	Temporal	Horizontal	Vertical
Instrument	Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	Vertical
HIRDLS	CHEM	Wind Velocity, Geostrophic	Barnett, Gille	1687	Bates	1685	BM	3 m/s :: 3 m/s	2/day [d,n]	4 x 4 dg :: G	4 x 4 dg :: G	1 km :: 7-80 km
HIRDLS	CHEM	H2O Conc	Barnett, Gille	1817	Bates	1808	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	4 x 4 dg :: G	1 km :: 7-80 km
					Schoeberl	1821	BM	5-10% :: 1-5%	2/day	4 x 4 dg :: G	4 x 4 dg :: G	1-1.5 km :: 10-80 km
					Schoeberl	1822	BM	10% :: 5%,0.05s	1/day	2 x 3 dg :: G	2 x 3 dg :: G	1.5 km :: 0-Strat
					Hansen	1812	BM	10% :: 0.05	1/day	4 x 3 dg :: G	4 x 3 dg :: G	2.5 km :: Meso
					Hansen	1864	AM	3% ::	1/wk	500 km :: G	500 km :: G	:: Atmos
					Groase	1811	AM	15% :: 5%	2/day	30 x 4 dg :: G	30 x 4 dg :: G	Column :: Strat
					Pyle	1819	AM	10% :: 5%	2/day	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat
HIRDLS	CHEM	Aerosol Extinction Coef	Barnett, Gille	1992	Murakami	2327	BM	5-10% ::	2/day [d,n]	4 x 4 dg :: G	4 x 4 dg :: G	1 km :: 7-30 km
					Mouginis-Mark	3263	BM	5-10% ::	1/wk	:: G	:: G	N/A :: Atmos
					Bates	1005	BM	1K(1-3 day) [few day]	1K(1-3 day) [few day]	100 km :: G	100 km :: G	1 km :: Atmos
					Pyle	1003	BM		2/day	:: G	:: G	:: Strat
					Mouginis-Mark	3264	AM		1/wk	:: G	:: G	:: Trop
					Schoeberl	1010	AM-\$	10% :: 5%	1/day	200 km :: G	200 km :: G	1 km :: Strat
					Groase	1006	AM-\$	20% :: 10%	2/day	15 x 4 dg :: G	15 x 4 dg :: G	2 km :: Strat
					Kerr, Sorooshian	1007	AM-\$	5% :: 5%	1/day	25 km :: Land	25 km :: Land	3 km :: Atmos
					Hansen	1001	AM	tau=0.02 ::	1/wk	500 km :: G	500 km :: G	:: Trop
					Hansen	2287	AM	tau=0.02 ::	1/wk	500 km :: G	500 km :: G	:: Strat
HIRIS	AM2	Chlorophyll_a Conc, Phytoplankton, Case-I \ Carder, Davis	Carder, Davis	2564	Harris	3456	AM	50% :: 25%	1/2 day [d]	30-90 m :: Ocean-IL	30-90 m :: Ocean-IL	N/A :: TOO
								20-30% :: 10-15%	2-10 days	0-25-1 km :: Ocean/R	0-25-1 km :: Ocean/R	N/A :: TOO
HIRIS	AM2	Chlorophyll_a Conc, Case-II Waters	Carder, Melack	2565	Harris	3454	AM	100% :: 50%	1/2 day [d]	60-90 m :: Ocean-IL	60-90 m :: Ocean-IL	N/A :: TOO
								40% :: 20%	2-10 days	0-25-1 km :: Ocean/R	0-25-1 km :: Ocean/R	N/A :: Sfc
HIRIS	AM2	Ocean Water Backscatter Coef@565nm	Carder, Melack	3210	Harris	3448	BM-	50% :: 25%	1/2 day [d]	30-90 m :: Ocean/L	30-90 m :: Ocean/L	N/A :: Sfc
								20% :: 10%	2-10 days	0-25-1 km :: Ocean/R	0-25-1 km :: Ocean/R	N/A :: Sfc
HIRIS	AM2	Gelbstoff Absorption Coef@410nm	Carder, Melack	3215	Brewer	3213	BM-	50% :: 25%	1/2 day [d]	30-90 m :: Ocean-IL	30-90 m :: Ocean-IL	N/A :: TOO
					Brewer	3214	BM-	50% :: 10%	1/day, 1/week	30 m :: Ocean/L	30 m :: Ocean/L	N/A :: TOO
					Harris	3453	BM	50% :: 10%	1/day, 1/week	20 km :: Ocean	20 km :: Ocean	N/A :: TOO
								20% :: 10%	2-10 days	0-25-1 km :: Ocean/R	0-25-1 km :: Ocean/R	N/A :: TOO
HIRIS	AM2	Organic Matter Conc, Dissolved	Carder, Melack	3314	Brewer	2562	BM	100% :: 50%	(>=2/day)	0-90 m :: Ocean/L+Land/Lakes	0-90 m :: Ocean/L+Land/Lakes	N/A :: TOO
					Richey, Batista	2654	AM-\$	100% :: 10%	1/day, 1/week	30 m :: Ocean/L	30 m :: Ocean/L	N/A :: TOO
								20% :: 10%	1/wk	1 km :: Land/R	1 km :: Land/R	N/A :: TOO
HIRIS	AM2	Suspended Solids Conc, Ocean Water	Carder, Melack	3315				100% :: 50%	(>=2/day)	0-90 m :: Ocean/L+Land/Lakes	0-90 m :: Ocean/L+Land/Lakes	N/A :: TOO
					Barrois	2804	BM	25% ::		10 km :: Land/R-Lakes	10 km :: Land/R-Lakes	N/A :: Sfc
HIRIS	AM2	Pigment Conc, Accessory	Davis, Melack	3072	Harris	3459	BM	100% :: 50%	1/(>=2 day)	60-90 m :: Ocean-IL	60-90 m :: Ocean-IL	N/A :: TOO
								20% :: 10%	2-10 days	0-25-1 km :: Ocean/R	0-25-1 km :: Ocean/R	N/A :: TOO
HIRIS	AM2	Ocean Productivity, Primary,	Davis, Melack et al.	2601	Abbott	2584	AM-\$	50% :: 20%	1/1-2 day)	1-4 km :: Ocean [Southern]	1-4 km :: Ocean [Southern]	N/A :: TOO
								100% :: 50%	1/(>=2 day)	30-90 m :: Ocean/L	30-90 m :: Ocean/L	N/A :: TOO
					Brewer	2600	BM	50% :: 5%	1/day, 1/week	30 m :: Ocean/L	30 m :: Ocean/L	N/A :: TOO
					Harris	3460	AM	30% :: 5%	1/day	1-20 km :: Ocean/R	1-20 km :: Ocean/R	N/A :: TOO
								5% :: 1%	1/wk, 1/mo	50 m :: Land/L	50 m :: Land/L	N/A :: Sfc
HIRIS	AM2	Snow Reflectance, Spectral	Dostler	2440	Dickinson	3364	BM			High res :: Land	High res :: Land	N/A :: Sfc
					Lau	2018	BM	10% :: 10%	1/wk	100 m :: Land/R	100 m :: Land/R	N/A :: Sfc
					Hansen	2017	AM	0.02 ::	1/wk	500 km :: Land	500 km :: Land	:: Sfc
					Dostler	2020	AM-	5% :: 1%	1/wk, 1/mo	50 m :: Land/L	50 m :: Land/L	N/A :: Sfc
					Simard	2019	AM	2% ::		:: Canada/R	:: Canada/R	N/A :: Sfc

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product				IDS Input Requirements			Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Instrument	Platforms	Product Name	TM	Prod #	Investigator	Prod # Match Type				
HIRIS	AM2	Snow Contaminant Conc	Dosier	2768	Dosier	2767 BM	20% :: 20%	1/wk, 1/mo	50 m :: Snow/L	N/A :: Sfc
HIRIS	AM2	Glacier Cover, Bare_Ice	Dosier	2922	Isacks	2923 BM	5% :: 2%	1/wk, 1/mo	50 m :: Snow/L	N/A :: Sfc
HIRIS	AM2	Snow Liq-water Content	Dosier	2943	Dosier	3039 BM	100% :: 100%	1/wk, 1/mo	10-30 m :: Land/L	N/A :: Sfc
					Moore	3027 BM	100% :: 100%	1/wk, 1/mo	50 m :: Snow/L	N/A :: Sfc
					Simard	3043 AM		1/wk	1 km :: Land	:: Sfc
HIRIS	AM2	Snow Cover	Dosier	3019	Dosier	3008 BM	5% :: 2%	1/wk, 1/mo	:: Canada/R	N/A :: Sfc
					Simard	3043 BM	10% :: 10%	1/wk, 1/mo	50 m :: Cryo/L	N/A :: Sfc
					Leu	3012 BM	50 :: 10	1/wk	100 m :: Land/L	N/A :: Sfc
					Isacks	3011 BM	5% :: 2%	1/week	15-30 m :: Land/L	N/A :: Sfc
					Barron	3004 BM	5% :: 5%	1/day	30 m :: Land/L	N/A :: Sfc
					Hansen	3009 AM	0.02 ::	1/wk	500 km :: Land	:: Sfc
HIRIS	AM2	Snow Cover, Wet	Dosier	3029	Dosier	3043 BM	5% :: 2%	1/wk, 1/mo	50 m :: Glacier/L	N/A :: Sfc
					Simard	3028 AM	10% :: 10%	1/wk, 1/mo	:: Canada/R	N/A :: Sfc
HIRIS	AM2	Snow Cover, Wet	Dosier	3030	Dosier	3028 BM	10% :: 10%	1/wk, 1/mo	50 m :: Cryo/L	N/A :: Sfc
HIRIS	AM2	Snow Grain Size	Dosier	3038	Dosier	3037 BM	200% :: 200%	1/wk, 1/mo	50 m :: Snow/L	N/A :: Sfc
					Simard	3043 AM	200% :: 200%	1/wk, 1/mo	50 m :: Snow/L	N/A :: Sfc
HIRIS	AM2	Land_sfc Reflectance, Bi-directional, (BRDF, Gerbil	2035		Sellers	2041 BM	5% :: 5%	1/(16 day)	30 m :: Land/L	N/A :: Sfc
					Kerr, Serodoshim	2042 BM	10% :: 10%	1/week	250-500 m :: Land	
					Kerr, Serodoshim	2046 BM	10% :: 10%	1/week	N/A :: Land	N/A :: Sfc
					Kerr, Serodoshim	2428 AM	3% :: 5%	1/(2 mo)	30 m :: Land/R	:: Sfc
					Chilar	3496 AM	0.05 :: 0.001	1 wk (for 1 yr)	:: Canada/R	N/A :: Sfc
					Brewer	2427 AM	3% :: 1%	1/day, 1/week	22 km :: Ocean/L	N/A :: Sfc
HIRIS	AM2	Aerosol Optical Depth	Gerbil	2292	Moore	1009 AM-\$	0.05 :: 0.01	1/(2-16 day)	100 m :: L	Column :: Atmos
					Moore	1008 AM-\$	50% ::	1/(2 day)	30 m :: L	
					Mouginia-Mark	3273 AM	50% ::	1/(2 day)	1 km :: G	
					Sellers	2288 AM	1 km ::	1/orbit, 1/day	1 km :: Land/L	N/A :: Plume_col
HIRIS	AM2	Precipitable Water	Goats	1872	Richey, Baista	1863 AM	10% :: 3%	1/(1-3 min), 1/(2-16 day)	30 m :: L	Column :: Atmos
HIRIS	AM2	Precipitable Water	Goats	1873	Barron	1859 BM	10% :: 3%	1/(1-3 min), 1/(2-16 day)	1 km :: R	Column :: Trop
HIRIS	AM2	Level-1B Radiance, HIRIS	Goats	2370	Brewer	2414 BM	3% :: 1%	1/day	30 m :: L	Column :: Trop
HIRIS	AM2	Glacier Displacement	Kieffer	2895	Simard	2894 BM	1% :: 0.2%	1/yr	30 m :: Ocean/L	N/A :: TOO
					Barron	2929 AM	10 cm ::	1/yr, 1/week	30 m :: Glacier/L	N/A :: Sfc
					Isacks	2923 AM	::		:: Canada/R	N/A :: Sfc
HIRIS	AM2	Glacier Velocity	Kieffer	2930	Isacks	2923 AM	5% :: 2%	1/week	10-30 m :: Land/L	N/A :: Sfc
					Barron	2929 AM	10^-6 :: variable	1/yr	100 m :: Land/Cryo	N/A :: Sfc
							::		:: Land/Cryo	N/A :: Sfc

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument	Platform	Instrument Output Data Product			IDS Input Requirements		Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
		Product Name	TM	Prod #	Investigator	Prod # Match Type				
HIRIS	AM2	Ice Sheet Velocity (Outflow), Polar	Kieffer	2932	Barroa	2929 BM	10^6 :: variable	1/yr	100 m :: Cryo	N/A :: Sfc
					Sinaad	2896 AM	10 cm ::	1/yr, 1/season	Land/Cryo	N/A :: Sfc
							30 m ::		Canada/R	N/A :: Sfc
HIRIS	AM2	Landform Sfc units, Geologic	Kieffer, Clark	2884	Isacks	2851 BM		1/mision	30 m :: L	N/A :: Sfc
					Kerr, Sorocobian	2882 BM		1/yr	15-30 m :: Land/R	N/A :: Sfc
					Lau	3049 AM \$	10 :: 10	1/mision	30 m :: Land/R	N/A :: Sfc
					Isacks	2982 AM \$			15-30 m :: Land/L	N/A :: Sfc
					Barroa	2905 AM \$	30 m ::	1/(3 mo)	30 m :: Land/L	N/A :: Sfc
					Isacks	2902 AM \$	100m^2 :: 100m^2	1/mision, 1/yr	15-30 m :: Land/R	N/A :: Sfc
					Lau	2904 AM \$	10% :: 5%	1/mision	10 m :: Land/L	N/A :: Sfc
HIRIS	AM2	Mineral(CO3) Relative Abundance	Rowan, Clark	2766	Barroa	2795 AM	10% :: 5%	1/season	30 m :: Land/L	N/A :: Sfc
					Isacks	2778 AM		1/mision	30 m :: Land/L	N/A :: Sfc
							10% :: 5%	1/season	15-30 m :: Land/L	N/A :: Sfc
					Barroa	2795 AM		1/mision	30 m :: Land/L	N/A :: Sfc
					Isacks	2778 AM	10% :: 5%	1/mision	30 m :: Land/L	N/A :: Sfc
HIRIS	AM2	Mineral(SO4) Relative Abundance	Rowan, Clark	2776	Barroa	2795 AM	10% :: 5%	1/season	30 m :: Land/L	N/A :: Sfc
					Isacks	2778 AM	10% :: 5%	1/mision	30 m :: Land/L	N/A :: Sfc
					Kerr, Sorocobian	2802 AM	10% :: 5%	1/yr	30 m :: Land/R	N/A :: Sfc
					Barroa	2795 AM	10% :: 5%	1/mision	30 m :: Land/L	N/A :: Sfc
					Isacks	2778 AM	10% :: 5%	1/mision	15-30 m :: Land/L	N/A :: Sfc
HIRIS	AM2	Mineral(Fe) Relative Abundance	Rowan, Clark	2772	Barroa	2795 AM	10% :: 5%	1/season	30 m :: Land/L	N/A :: Sfc
					Isacks	2778 AM	10% :: 5%	1/mision	30 m :: Land/L	N/A :: Sfc
					Kerr, Sorocobian	2802 AM	10 C :: 5 C	1/yr	30 m :: Land/R	N/A :: Sfc
					Barroa	2795 AM	10 C ::	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc
					Isacks	2778 AM	10 C ::	2/day [d.n]	30 m :: Land/L	N/A :: Sfc
HIRIS	AM2	Volcano-Activity Temperature	Rowan, Goetz	3294	Mouginis-Mark	3292 AM	30 m(hor) ::	2/day [d.n]	30 m :: Land/L	N/A :: Sfc
					Mouginis-Mark	3262 AM	(30m)^2 ::	2/day [d.n]	30 m :: Land/L	N/A :: Sfc
					Mouginis-Mark	3266 AM	1 C ::	1/yr	30 m :: Land/L	N/A :: Sfc
					Mouginis-Mark	3295 AM	10 C ::	[near-real time ?]	1 km :: G	N/A :: Sfc
HIRIS	AM2	Volcano-Activity Extent	Rowan, Goetz	3299	Mouginis-Mark	3262 AM	30 m(hor) ::	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc
					Mouginis-Mark	3266 AM	(30m)^2 ::	2/day [d.n]	30 m :: Land/L	N/A :: Sfc
					Kerr, Sorocobian	2428 BM	3% :: 1%	1/mo	30 m :: Land/R	N/A :: Sfc
					Sellers	2041 AM	3% :: 5%	1/(2 mo)	30 m :: Land/R	N/A :: Sfc
HIRIS	AM2	Land_sfc Reflectance, Directional	Slater	2432	Kerr, Sorocobian	2636 BM	40% :: 20%	1/(2-16 day)	250-500 m :: Land	N/A :: Sfc
					Cibler	3502 BM	10% :: 10%	1/season	30 m :: Land/R	N/A :: Sfc
					Dictinson	3402 BM			1 km :: Canada/R	N/A :: Sfc
					Barroa	2639 AM \$		1/season	Med-low res :: Land	N/A :: Sfc
					Schmid	2641 AM \$	5% ::	1/yr	30 m :: Land/L	N/A :: Sfc
					Schmid	2642 AM \$	5% ::	1/yr	300 m :: 6 sites/L	N/A :: Sfc
					Schmid	2643 AM \$	5% ::	[multiple]	500 m :: 6 sites/L	N/A :: Sfc
					Barroa	2640 AM \$		1/season	[multiple] :: 6 sites/L	N/A :: Sfc
					Rickey, Batista	2726 AM \$	10% :: 10%	1/season	10 km :: Land/R	N/A :: Sfc
					Rickey, Batista	2693 AM \$		1/mo	1 km :: Land/R	N/A :: Sfc

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product				IDS Input Requirements				Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Instrument	Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type			
HIRIS	AM2	Vegetation Crown Spacing	Utina	2637	Kerr, Sorooshian	2638	BM	1/2-16 day	30 m :: Land/L	N/A :: Sfc
					Barron	2639	AM \$	20% :: 10%	60 m :: Land/R	:: Sfc
					Schimel	2641	AM \$:: 5%	30 m :: Land/L	N/A :: Sfc
					Schimel	2642	AM \$:: 5%	30 m :: 6 sites/L	N/A :: Sfc
					Schimel	2643	AM \$:: 5%	500 m :: 6 sites/L	N/A :: Sfc
					Kerr, Sorooshian	2634	AM	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
					Barron	2640	AM \$	1/ceus	60 m :: Land/R	:: Sfc
					Richy, Batista	2693	AM \$	10% :: 10%	10 km :: Land/R	N/A :: Sfc
					Isacks	2744	AM	20% :: 10%	1 km :: Land/R	N/A :: Sfc
					Barron	2787	AM	1 :: 0.5	30-60 m :: Land/L	N/A :: Sfc
					Barron	2739	AM	5 :: 5	30 m :: Land/L	N/A :: Sfc
					Kerr, Sorooshian	2733	AM	30 m ::	30 m :: Land/L	N/A :: Sfc
					Lau	2734	AM	1/ceus	30 m :: Land/R	:: Sfc
					Bates	2676	AM	1/ceus	30 m :: Land/L	N/A :: Sfc
HIRIS	AM2	PAR, Absorbed, Vegetative, (APAR)	Utina, Westman	2030	Barron	2675	AM	0.5 :: 0.2	60 m :: Land	N/A :: Sfc
					Schimel	2678	AM	10% :: 1%	30 m :: Land/L	N/A :: Sfc
					Isacks	2743	AM	1 :: 1	30 m :: 6 sites/L	N/A :: Sfc
					Cihlar	3504	AM	15% :: 15%	240-500 m :: Land/R	N/A :: Sfc
					Moore	2328	BM	25% :: 10%	100 m :: Canada/R	N/A :: Sfc
					Schimel	2264	BM-	25% :: 10%	30 m :: Land/L	N/A :: Sfc
					Barron	2612	BM	30% :: 15%	30 m :: 6 sites/L	N/A :: Sfc
					Sellers	2628	BM	25% :: 15%	30 m :: Land/L	N/A :: Sfc
					Barron	2613	BM	25% :: 15%	30 m :: L	N/A :: Sfc
					Richy, Batista	2627	BM	25% :: 15%	10 km :: R	N/A :: Sfc
HIRIS	AM2	Vegetation Biomass, Green	Utina, Westman	2620	Barron	2615	BM	20% :: 20%	1 km :: Land/R	N/A :: Sfc
					Isacks	2617	BM	30% :: 15%	30 m :: Land/L	N/A :: Sfc
					Moore	2619	BM	25% :: 15%	30 m :: L	N/A :: Sfc
					Sellers	2628	BM	40% :: 15%	30 m :: Land/L	N/A :: Sfc
					Barron	2616	BM	40% :: 15%	30 m :: Land/L	:: Sfc
					Dickinson	3397	BM	25% :: 15%	10 km :: R	N/A :: Sfc
					Moore	2618	BM	40% :: 15%	<0.5-1 deg :: Land	:: Sfc
					Richy, Batista	2627	BM	20% :: 20%	500 m :: Land/R	:: Sfc
					Schimel	2651	BM	25% :: 10%	1 km :: Land/R	N/A :: Sfc
					Schimel	2652	BM	10% :: 1%	30 m :: 6 sites/L	N/A :: Sfc
HIRIS	AM2	Vegetation Chlorophyll Conc	Utina, Westman	2653	Moore	2650	BM	20% :: 10%	[multiple] :: 6 sites/L	N/A :: Sfc
					Moore	2649	BM	20% :: 10%	1 km :: Land/R	N/A :: Sfc
					Barron	2715	BM	20% :: 10%	30 m :: Land/L	:: Sfc
					Barron	2787	BM	5 :: 5	30 m :: Land/L	N/A :: Sfc
					Kerr, Sorooshian	2634	BM	5 :: 5	30 m :: Land/L	N/A :: Sfc
					Dickinson	3400	BM		60 m :: Land/R	:: Sfc
					Kerr, Sorooshian	2630	AM	5% :: 5%	High res :: Land	N/A :: Sfc

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product				IDS Input Requirements			Accuracy	Temporal	Horizontal	Vertical	
Instrument	Platform	Product Name	TM	Prod #	Investigator	Prod # Match Type	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	
HIRIS	AM2	Vegetation Cover	Ustin, Weissman	2741	Cibler	3502	AM			1 km :: Canada/R	N/A :: Sfc
					Barron	2640	AM \$		1/season	10 km :: Land/R	N/A :: Sfc
					Richy, Badiu	2726	AM \$		1/season	1 km :: Land/R	N/A :: Sfc
					Moore	2721	AM	15% :: 15%	1/yr	1 km :: Land	:: Sfc
					Sellers	2740	AM		1/(1-4 day)	100 km ::	:: Sfc
					Sinard	2720	AM	10% ::		:: Canada/R	N/A :: Sfc
								50 m :: 50 m	1/(2-16 day)	30 m :: L	N/A :: Cloud
					Barron	1382	BM	100 m :: 50 m	1/day	30 m :: L	100 m :: Cloud
					Wielicki	1387	AM	0.1 km :: 0.1 km	1/(16 day)	0.2 km :: R	0.1 km :: Atmos
					Kerr, Sorooshian	1385	AM	200m :: 200m	1/yr	1 km :: Land	100 mb :: Trop
HIRIS	AM2	Cloud Drop Phase	Welch	1762	Wielicki	1760	AM	25% :: 10%	1/(16 day)	30 m :: L	N/A :: Atmos
								20% :: 10%	1/(2-16 day)	30 m :: L	:: Cloud
					Dickinson	3348	BM			<0.5-1 deg :: G	
					Wielicki	1771	AM	25% :: 10%	1/(16 day)	03-10 km :: R	N/A :: Atmos
					Hartmann	1775	AM	20% :: 20%	1/day	10 km :: G	0-15 km :: Cloud
								10 km ::	1/(2-16 day)	30 m :: L	:: Cloud
					Wielicki	1771	AM	25% :: 10%	1/(16 day)	03-10 km :: R	N/A :: Atmos
								5% :: 5%		90 m :: R	:: Cloud
					Sellers	2007	BM			<0.5-1 deg :: G	
					Dickinson	3361	BM			500 m :: Land/R	:: Cloud
HIRIS	AM2	Cloud R reflectance, Bi-directional, (BRDF)	Welch	2037	Kerr, Sorooshian	2006	AM \$	5% :: 5%	1/yr	30 m :: R	:: Cloud
								1%			
					Wielicki	2423	AM	5% :: 2%	1/day	0.2-2 km :: R	N/A :: Cloud
								1% :: 0.5%	1/(1-3 min), 1/(2-16 day)	30 m :: L	:: Cloud
					Barron	2051	BM	5 :: 5	1/day	30 m :: L	N/A :: Cloud
					Wielicki	2077	BM	2% :: 2%	1/(16 day)	30 m :: R	N/A :: Atmos
					Moore	2057	AM	10% :: 10%	1/wk	1 km :: G	
					Kerr, Sorooshian	2075	AM	5% :: 5%	1/day	10 km :: Land/R	N/A :: Cloud
								30% :: 10%		90 m :: R	:: Cloud
					Kerr, Sorooshian	1905	AM			30 m :: Land/R	:: Cloud
HIRIS	AM2	Cloud Optical Depth	Welch	2309				3% :: 1.5%	1/(1-3 min), 1/(2-16 day)	30 m :: L	N/A :: Cloud
					Barron	2303	BM	3% :: 3%	1/day	30 m :: Ocean/L	N/A :: Cloud
								500 m :: 250 m	1/(2-16 day)	30 m :: L	N/A :: Cloud
					Barron	1414	BM	100 m :: 25 m	1/day	30 m :: L	100 m :: Cloud
					Wielicki	1421	AM	0.1 km :: 0.1 km	1/(16 day)	0.2 km :: R	0.1 km :: Atmos
					Kerr, Sorooshian	1417	AM	:: 0.5 km	1/yr	1 km :: Land/R	:: Cloud
								10% :: 10%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc
					Barron	2729	BM	57 :: 57	1/yr	30 m :: Land/L	N/A :: Sfc
					Kerr, Sorooshian	2733	BM		1/season	30 m :: Land/R	:: Sfc
					HIRIS	AM2	Cloud Height, Top	Welch, Goetz	1426	Lau	2734
Barron	2739	BM	30 m ::	1/(3 mo)						30 m :: Land/L	N/A :: Sfc
Cibler	3504	BM	15% :: 15%	once						100 m :: Canada/R	N/A :: Sfc
Kerr, Sorooshian	2630	AM	5% :: 5%	1/season						:: Land/R	N/A :: Sfc
Barron	2799	AM	57 :: 57	1/yr						30 m :: Land/L	N/A :: Sfc
Barron	2787	AM	5 :: 5	1/season						30 m :: Land/L	N/A :: Sfc
Dickinson	3400	AM								High_res :: Land	N/A :: Sfc
Barron	2728	AM	57 :: 57	1/yr						10 km :: Land/R	N/A :: Sfc

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument	Platform	Instrument Output Data Product			IDS Input Requirements		Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
		Product Name	TM	Prod #	Investigator	Prod # Match Type				
HIRIS	AM2	Vegetation Type	Westman	2644	Dickinson	3405 AM			<0.5-1 deg :: Land	
HIRIS	AM2	Vegetation Cellulose Conc	Westman, Aber	2648	Hansen	2731 AM	5% ::	1/wk	500 km :: Land	:: Sfc
							40% :: 10%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc
					Moore	2647 BM	20% :: 20%	1/(16 day)	30 m :: Land/L	
					Moore	2696 AM-\$	20% :: 20%	1/(16 day)	30 m :: Land/L	:: Sfc
HIRIS	AM2	Vegetation Lignin Conc	Westman, Aber	2687	Moore	2695 AM-\$	20% :: 20%	1/(16 day)	1 km :: Land/R	:: Sfc
							40% :: 20%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc
					Moore	2684 BM	20% :: 20%	1/(16 day)	30 m :: Land/L	
					Schmid	2685 BM	20% :: 1%	1/week	30 m :: 6 sites/L	N/A :: Sfc
HIRIS	AM2	Vegetation Leaf-litter Water Content	Westman, Goetz	2761	Schmid	2686 BM	20% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
					Moore	2696 AM-\$	20% :: 20%	1/(16 day)	30 m :: Land/L	:: Sfc
					Moore	2695 AM-\$	20% :: 20%	1/(16 day)	1 km :: Land/R	:: Sfc
							50% :: 20%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc
LIS	TRM	Lightning Rate	Christian	1756	Moore	2760 BM	20% :: 20%	1/day, 1/wk	30 m :: Land/L	:: Sfc
					Moore	2762 AM-\$	20% :: 20%	1/day, 1/wk	30 m :: Land/L	:: Sfc
							:: 5%		.07 deg :: G	N/A :: Atmos
					Barroo	1757 BM	10% :: 10%	1/day	10 km :: G	N/A :: Atmos
LIS	TRM	Lightning Radiance Energy	Christian	3643	Kerr, Sorooshian	1758 BM	1 :: 1	1/(10 min)	1 km :: Land	:: Trop
					Dickinson	3340 BM			<0.5-1 deg :: G	
									<0.5-1 deg :: G	
					Dickinson	3340 BM			.07 deg :: G	N/A :: Atmos
MIMR	PM	Wind Stress, Sea_sfc	TBD	3594					<0.5-1 deg :: G	
					Bates	1709 BM		2/day (d.n)	39 km :: Ocean	N/A :: Sfc
					Brewer	1710 BM	15% :: 5%	1/day, 1/week	50 km :: Ocean	N/A :: Sfc
					Srokosz	1716 BM	1 m/s :: 0.1 m/s	1/day	25 km :: Ocean	N/A :: Sfc
					Tapley	1745 BM	10% ::	4/day	25 km :: Ocean [South Atlan]	N/A :: Sfc
					Abbott	1707 AM	10% :: 5%	1/(10-20 day)	50 km :: Ocean	N/A :: Sfc
					Abbott	1708 AM	10% :: 5%	1/(1-2 day)	25 km :: Ocean [Southern]	N/A :: Sfc
					Bates	1742 AM			25 km :: Ocean [Southern]	N/A :: Sfc
					Lau	1743 AM	0.01 ::		:: Ocean	:: Sfc
					Liu	1713 AM	1 :: 1	1/day	:: Ocean	N/A :: Sfc
					Murkani	1744 AM	0.01 ::		25 km :: Ocean	N/A :: Sfc
					Hansen	1663 AM	10% ::	1/wk	500 km :: Ocean	N/A :: Sfc
					Lau	1739 AM	0.5 m/s :: 2%	2/day	100 km :: G	N/A :: Sfc
					Harris	3435 AM	5-10% :: 2-10%	1-10 days	1-25 km :: Ocean/R	N/A :: Sfc
					Tapley	1717 AM	1 m/s ::	4/day	50 km :: Ocean	N/A :: Sfc
MIMR	PM	Wind Stress, Sea_sfc	TBD	3595				1 mo	1 deg :: Ocean	N/A :: Sfc
					Bates	1742 BM			:: Ocean	:: Sfc
					Lau	1743 BM	0.01 ::		:: Ocean	N/A :: Sfc
					Murkani	1744 BM	0.01 ::		:: Ocean	N/A :: Sfc
					Abbott	1707 AM	10% :: 5%	1/(10-20 day)	25 km :: Ocean [Southern]	N/A :: Sfc
									22 km :: Ocean	Column :: Trop
					Harris	3439 BM		1/day	10-25 km :: Ocean/R	Column :: Trop
					Liu	1866 BM	0.5 :: 0.5	1/day	25 km :: Ocean	Column :: Trop
MIMR	PM	Precipitable Water	TBD	3596	Srokosz	1868 BM	1 kg/m^2 :: 0.1 kg/m^2	2/day	10 km :: Ocean [South Atlan]	N/A :: Atmos
					Abbott	1858 AM	10% :: 5%	1/(1-2 day)	25 km :: Ocean [Southern]	Column :: Trop
					Barroo	1860 AM	3% :: 1%	1/day	10 km :: R	Column :: Trop

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument			Instrument Output Data Product			IDS Input Requirements				Accuracy	Temporal Resolution	Horizontal	Vertical
Platform	Product Name	TM	Prod #	Investigator	Prod # Match Type	Abs :: Rel		Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.			
MIMR	Cloud Liq_ water Total Column	TBD	3598	Hartmann	1919	BM	0.05 :: 0.05	1/day	22 km :: Ocean	N/A :: Trop			
				Barron	1903	BM	0.1 :: 0.05	1/day	10 km :: R	Column :: Trop			
				Wielicki	1906	AM	20% :: 10%	2/day [d,n]	12-25 km :: G	N/A :: Atmos			
				Wielicki	1907	AM	50% :: 10%	6/day [d,n]	25-100 km :: G	N/A :: Atmos			
				Dickinson	3357	AM			<0.5-1 deg :: G				
				Abbott	1918	AM	10% :: 5%	1/(1-2 day)	25 km :: Ocean [Southern]	Column :: Trop			
				Srokosz	1922	AM	10% :: 0.1kg/m^2	2/day	10 km :: Ocean [South Atlan]	N/A :: Trop			
				Abbott	1972	BM	5% :: 1%	(1-2)/day	22 km :: Global	N/A :: Sfc			
				Isacks	1933	BM		1/event, 1/mo	25 km :: Ocean [Southern]	N/A :: Trop			
				Simard	1937	BM	20% ::		5-50 km :: Land/R :: Canada/R	N/A :: Sfc			
				Srokosz	1975	BM	10% :: 1mm/hr	2/day	10 km :: Ocean [South Atlan]	N/A :: Trop			
				Dickinson	3359	BM			<0.5-1 deg :: G				
				Liu	1973	BM	1 :: 1	2/day	25 km :: Ocean	N/A :: Trop			
MIMR	Precipitation Rate	TBD	3600	Bates	1958	BM			10 km :: G	1 km :: Sfc			
				Kerr, Sorooshian	1959	BM	20% :: 20%	1/day	500 m :: G	N/A :: Trop			
				Brewer	1928	AM	2 :: TBD	1/day, 1/season	500 m :: G	N/A :: Sfc			
				Brewer	1929	AM	2 :: TBD	1/day, 1/season	500 m :: G	N/A :: Sfc			
				Hartmann	1931	AM	10 :: 10	1/day	10 km :: Ocean	N/A :: Trop			
				Lau	1936	AM	2 :: 2	1/day	50 km :: R	N/A :: Sfc			
				Murakami	1938	AM	10% ::						
				Wielicki	1940	AM	50% :: 25%	4/day [d,n]	25-50 km :: G	N/A :: Trop			
				Barron	1926	AM	2 :: 1	1/day	100 km :: G	N/A :: Trop			
				Harris	3441	AM	2 :: 1	2/day	20-50 km :: Ocean/R				
				Sellers	1939	AM		4/day	100 km ::				
				Barron	1927	AM	2 :: 1	1/day	10 km :: R	N/A :: Trop			
				Moore	1974	AM	10% :: 10%	1/wk	1 km :: G	N/A :: Sfc			
MIMR	Precipitation Index	TBD	3601	Murakami	1938	BM	10% ::	1 mo	1 dg :: Global				
				Dickinson	3359	BM							
				Hansen	1930	BM	10% ::	1/wk	<0.5-1 deg :: G	:: Sfc			
				Bates	1968	AM	2mm/hr :: 1mm/hr	2/day [d,n]	500 km :: G	N/A :: Trop			
				Isacks	1933	AM		1/event, 1/mo	50 km :: G	N/A :: Sfc			
				Bates	1970	AM		1/day	5-50 km :: Land/R	N/A :: Sfc			
				Cibler	3488	AM	0.1 mm :: 0.1 mm	1 day	26-52 km :: Land	N/A :: Sfc			
									500m :: Canada/R	N/A :: Sfc			
				Dickinson	3393	BM			60 km :: Ocean	N/A :: Sfc			
				Wielicki	2521	BM	1 K :: 0.5 K	1/wk	<0.5-1 deg :: Ocean	N/A :: Sfc			
				Abbott	2505	AM	1 K :: 0.1 K	(1-2)/day	1.25 dg :: Ocean	N/A :: Sfc			
				Barron	2506	AM	0.5 K ::	1/day	50 km :: Ocean [Southern]	N/A :: Sfc			
				Lau	2514	AM	0.5 K ::	1/wk	100 km :: Ocean	N/A :: Sfc			
MIMR	Sea_sfc Temperature (SST)	TBD	3603	Murakami	2518	AM	0.2 K ::		100 km :: Ocean	N/A :: Sfc			
				Lau	2515	AM	0.2 K :: 0.2 K	1/wk	200 km :: Ocean	N/A :: Sfc			
				Rodbrock	2519	AM	1 K :: 1 K	1/(2 day)	30 km :: G	N/A :: Sfc			
				Lau	2516	AM	0.5 K ::	1/day	50 km :: R	N/A :: Sfc			
				Bates	2509	AM	0.5 K :: 0.4 K	2/day [d,n]	50 km :: Ocean	N/A :: Sfc			

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument		Instrument Output Data Product			IDS Input Requirements		Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type				
MIMR	Sea Ice Temperature (SST)	TBD	3604	Dickinson	3393	BM	1 K ::	1 mo	1 dg :: Ocean	N/A :: Sfc
				Munkami	2518	AM	0.2 K ::		<0.5-1 dg :: Ocean	N/A :: Sfc
				Lau	2515	AM	0.2 K :: 0.2 K	1/wk	200 km :: Ocean	N/A :: Sfc
				Bates	2960	BM	:: 40%		60 km :: Land	N/A :: Sfc
				Dickinson	3411	BM			Low res :: Land	N/A :: Sfc
				Munkami	3066	BM			:: Land	N/A :: Sfc
				Sellers	2967	BM		1/(1-4 day)	100 km ::	:: Sfc
				Simard	2949	BM	10% ::		:: Canada/R	N/A :: Sfc
				Hansen	2962	BM	10% ::	1/wk	500 km :: Land	:: Sfc
				Barron	2947	BM	0.05 :: 0.02	1/day	100 km :: Land	N/A :: Sfc
MIMR	Soil Moisture	TBD	3605	Dickinson	3412	BM			Med res :: Land	
				Moore	2966	BM	30% :: 30%	1/wk, 1/mo	1-25 km :: Land	:: Sfc
				Barron	2946	BM	0.05 :: 0.02	1/day	10 km :: Land/R	N/A :: Sfc
				Lau	2963	BM	10% :: 5%	1/(3 day)	3 km :: Land/R	N/A :: Sfc
				Richer, Batista	2958	BM		1/mo	1 km :: Land/R	N/A :: Sfc
				Cahler	3493	AM-S-	10% :: 20%		1 km :: Canada/R	N/A :: Sfc
								1 mo	1 dg :: Land	N/A :: Sfc
				Munkami	3066	BM			:: Land	N/A :: Sfc
				Simard	2949	BM	10% ::		:: Canada/R	N/A :: Sfc
				Hansen	2962	BM	10% ::	1/wk	500 km :: Land	:: Sfc
MIMR	Snow Cover	TBD	3607	Dickinson	3411	AM			Low res :: Land	
				Barron	3003	BM	5% :: 5%	1/day	22 km :: Land	N/A :: Sfc
				Wielicki	3016	BM	10% :: 5%	1/day	100 km :: Land	N/A :: Sfc
				Sellers	3015	BM		1/(1-4 day)	50 km :: Land	N/A :: Sfc
				Munkami	3014	AM	10% ::		100 km ::	:: Sfc
				Sellers	1984	AM-S-			:: Land	N/A :: Sfc
				Bates	3006	AM		2/day [d,n]	50 km :: Land	N/A :: Sfc
				Hansen	3009	AM	0.02 ::	1/wk	500 km :: Land	:: Sfc
				Bates	3007	AM	<=5% :: <=5%	1/day, 1/wk	10 km :: Land	N/A :: Sfc
				Simard	3026	AM	10cm ::	1/(7 day)	10 km :: Canada/R	N/A :: Sfc
MIMR	Snow Cover	TBD	3608					1 mo	1 dg :: Land	N/A :: Sfc
MIMR	Sea Ice Age	TBD	3609	Munkami	3014	AM	10% ::		:: Land	N/A :: Sfc
									22 km :: Ocean/Cryo	:: Sfc
				Rothrock	3163	BM	0.2 :: 0.2	1/(3 day)	25 km :: Ocean/Cryo	N/A :: Sfc
				Barron	3173	BM		1/day	100 km :: Ocean/Cryo	N/A :: Sfc
				Barron	3174	BM		1/day	10 km :: Ocean/Cryo	N/A :: Sfc
MIMR	Sea Ice Conc	TBD	3611						22 km :: Ocean/Cryo	N/A :: Sfc
				Bates	3148	BM	10% :: 10%	2/day [d,n]	50 km :: Ocean/Cryo	N/A :: Sfc
				Dickinson	3417	BM			<0.5-1 dg :: Ocean/Cryo	
				Rothrock	3163	BM	0.2 :: 0.2	1/(3 day)	25 km :: Ocean/Cryo	N/A :: Sfc
				Rothrock	3178	BM	0.03 :: 0.03	1/(3 day)	25 km :: Ocean/Cryo	N/A :: Sfc
				Rothrock	3175	BM	0.2 :: 0.2	1/(3 day)	25 km :: Ocean/Cryo	N/A :: Sfc
				Wielicki	2919	BM	10% :: 5%	1/day	50 km :: Ocean/Cryo	N/A :: Sfc
				Rothrock	3188	BM	0.03 :: 0.03	1/(3 day)	25 km :: Ocean/Cryo	N/A :: Sfc
				Simard	3183	BM	50 cm ::		:: Canada/R	N/A :: Sfc

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument			Instrument Output Data Product			IDS Input Requirements			Accuracy	Temporal Resolution	Horizontal	Vertical
Platform	Product Name	TM	Prod #	Investigator	Prod # Match Type	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.	
MIMR	PM	Sea_Ice Conc	3611	Robrock	3103	BM	0.5 km :: 0.5 km	1/(3 day)	25 km :: Ocean/Cryo	N/A :: Sfc	N/A :: Sfc	
				Barron	3136	BM	5% :: 5%	1/day	100 km :: Ocean/Cryo	N/A :: Sfc	N/A :: Sfc	
				Barron	3173	BM		1/day	100 km :: Ocean/Cryo	N/A :: Sfc	N/A :: Sfc	
				Bates	3182	BM		1/(3 day)	100 km :: > 60 dgLAT		:: Sfc	
				Hansen	3150	BM	3% ::	1/wk	500 km :: Ocean/Cryo		:: Sfc	
				Barron	3137	BM	5% :: 5%	1/day	10 km :: Ocean/Cryo	N/A :: Sfc	N/A :: Sfc	
				Barron	3174	BM		1/day	10 km :: Ocean/Cryo	N/A :: Sfc	N/A :: Sfc	
				Brewer	3149	BM	10% :: 1%	1/day, 1/week	10 km :: Ocean/Cryo	N/A :: Sfc	N/A :: Sfc	
				Sinard	3141	BM	10km/10% ::	1/(7 day)	10 km :: Canada/R	N/A :: Sfc	N/A :: Sfc	
				Srokosz	3142	BM	10% :: 1%	1/day	10 km :: Ocean/Cryo	N/A :: Sfc	N/A :: Sfc	
				Abbott	3156	AM		1/day	25 km :: Ocean/Cryo	N/A :: Sfc	N/A :: Sfc	
				Sinard	3157	AM	25km ::	1/(7 day)	25 km :: Canada/R	N/A :: Sfc	N/A :: Sfc	
				Srokosz	3158	AM	0.1 dg :: 0.01 dg	1/day	N/A :: Ocean/Cryo	N/A :: Sfc	N/A :: Sfc	
				Barron	3161	AM	5% :: 5%	1/day	10 km :: Ocean/Cryo	N/A :: Sfc	N/A :: Sfc	
MIMR	PM	Sea_Ice Extent	3613									
				Abbott	3156	BM		1/day	25 km :: Ocean/Cryo	N/A :: Sfc	N/A :: Sfc	
				Robrock	3175	BM	0.2 :: 0.2	1/(3 day)	25 km :: Ocean/Cryo	N/A :: Sfc	N/A :: Sfc	
				Sinard	3162	BM	25km ::	1/(7 day)	25 km :: Canada/R	N/A :: Sfc	N/A :: Sfc	
				Robrock	3189	BM	0.05 :: 0.05	1/(3 day)	25 km :: Ocean/Cryo	N/A :: Sfc	N/A :: Sfc	
				Sinard	3157	BM	25km ::	1/(7 day)	25 km :: Canada/R	N/A :: Sfc	N/A :: Sfc	
				Sinard	3190	BM	10km/10% ::	1/(7 day)	10 km :: Canada/R	N/A :: Sfc	N/A :: Sfc	
				Srokosz	3158	BM	0.1 dg :: 0.01 dg	1/day	N/A :: Ocean/Cryo	N/A :: Sfc	N/A :: Sfc	
				Robrock	3103	BM	0.5 km :: 0.5 km	1/(3 day)	25 km :: Ocean/Cryo	N/A :: Sfc	N/A :: Sfc	
				Barron	3160	BM	5% :: 5%	1/day	100 km :: Ocean/Cryo	N/A :: Sfc	N/A :: Sfc	
				Barron	3161	BM	5% :: 5%	1/day	10 km :: Ocean/Cryo	N/A :: Sfc	N/A :: Sfc	
MISR	AM	Cloud Height, Top	1432*				<1000 m :: <1000 m	1/(5-16 day) [d]	5 km :: G	N/A :: Trop		
				Dickinson	3349	BM			<0.5-1 deg :: G			
				Barron	1413	AM	100 m :: 25 m	1/day	10 km :: R	100 m :: Cloud		
				Robrock	1419	AM	0.2km :: 0.2km	1/day	100 km :: Polar	:: Cloud		
				Hansen	1399	AM	50 m ::	1/wk	500 km :: G	:: Cloud		
				Kerr, Sorooshian	1417	AM	:: 0.5 km	1/hr	1 km :: Land/R	:: Cloud		
				Wielicki	1422	AM	0.5 km :: 0.1 km	6/day [d,n]	25-100 km :: G	0.1 km :: Atmos		
MISR	AM	Cloud Height, Top	1433*				100 m :: 100 m	1/(5-16 day) [d]	500 m :: R	N/A :: Trop		
				Kerr, Sorooshian	1417	BM	:: 0.5 km	1/hr	1 km :: Land/R	:: Cloud		
				Barron	1413	AM	100 m :: 25 m	1/day	10 km :: R	100 m :: Cloud		
MISR	AM	Aerosol Size-distribution	1993				15% :: 10%	1/(5-16 day) [d]	15.4 km :: G	Column :: Atmos		
				Bates	1019	BM	:: 20%	1/(5-16 day)	15.4 km :: G	Column :: Atmos		
				Hartmann	1020	BM	20% :: 20%	1/day	20 km :: G	N/A :: 0-15 km		
				Isacks	1024	AM	:: 20%	1/wk	2-15 km ::	Column :: Atmos		
				Schoeberl	1021	AM	10% :: 5%	1/day	200 km :: G	1 km :: Strat		
MISR	AM	Aerosol Size-distribution	1994*				15% :: 10%	1/(5-16 day)	1.9 km :: R	Column :: Atmos		
				Isacks	1024	BM	:: 20%	1/wk	2-15 km ::	Column :: Atmos		
				Hartmann	1020	AM	20% :: 20%	1/day	20 km :: G	N/A :: 0-15 km		
							<=0.03 :: 0.01	1/(5-16 day) [d]	1.92 km :: G	N/A :: TOA		
MISR	AM	Albedo, Planetary Spectral, TOA	2011				10% :: 10%	1/day	25 km :: Land/R	:: TOA		
				Barron	2023	AM	3 ::	1/day	100 km :: G	N/A :: TOA		

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product											
Instrument	Platform	Product Name	TM	Prod #	IDS Input Requirements			Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
MISR	AM	Albedo,Spectral, Land_sfc	Diner	2021*	Investigator	Prod #	Match Type	<=0.03 :: 0.01 :: 3%	1/(5-16 day) [d] 1/wk	240 m :: R 250 m :: Land/R High_res :: Land 50 m :: Land/L	N/A :: Sfc N/A :: Sfc
					Jacobs	1998	BM				
					Dickinson	3366	BM				
					Dozier	2020	BM				
					Kerr, Sorooshian	2014	BM				
MISR	AM	Albedo,Spectral, Land_sfc	Diner	2022				<=0.03 :: 0.01 2% ::	1/(5-16 day) [d] 1/wk	500 m :: Land 1.92 km :: G :: Canada/R High_res :: Land	N/A :: Sfc N/A :: Sfc N/A :: Sfc
					Simard	2019	BM				
					Dickinson	3367	BM				
					Hansen	2017	BM				
MISR	AM	Cloud Reflectance, Bi-directional, (BRDF)	Diner	2038*	Wielicki	3615	BM	3% :: 1% 5% :: 2% 5% :: 2% 5% :: 2% 5% :: 5%	[variable] [d] TBD 1/day 1/hr	240 m :: R 10 dg [Angle] :: G 0.2-2 km :: R 500 m :: Land/R	N/A :: Trop N/A :: Cld N/A :: Cloud :: Cloud
					Wielicki	2423	BM				
					Kerr, Sorooshian	2006	AM \$				
					Sellers	2007	AM				
MISR	AM	Cloud Reflectance, Bi-directional, (BRDF)	Diner	2039*	Liu	2546	BM	3% :: 1% 5% :: 2% 5% :: 2% 0.05/10% :: 0.05/10% 5-15% :: 1-10% 10% :: 10% 5-10% :: 50% :: :: 1 km ::	[variable] [d] TBD 1/day 1/(5-16 day) [d] 1/wk 1/(5-16 day) 1/(2 day)	1.92 km :: G :: G 10 dg [Angle] :: G 0.2-2 km :: R 1.92 km :: R 10-50 km :: Land/R 10 km :: Land/R :: G 1 km :: G	N/A :: Trop N/A :: Cloud N/A :: Cld Column :: Atmos Column :: Atmos N/A :: Atmos
					Wielicki	3615	BM				
					Wielicki	2423	BM				
					Jacobs	2326	BM				
					Kerr, Sorooshian	2325	BM				
MISR	AM	Aerosol Optical Depth	Diner	2298*	Munkami	2327	AM	0.05/10% :: 0.05/10% 5-15% :: 1-10% 10% :: 10% 5-10% :: 50% :: :: 1 km ::	1/(5-16 day) [d] 1/wk 1/day 1/(5-16 day) 1/(2 day)	1.92 km :: R 10-50 km :: Land/R 10 km :: Land/R :: G 1 km :: G	Column :: Atmos Column :: Atmos N/A :: Atmos
					Moore	1008	AM-\$				
					Sellers	2288	AM				
					Mouginis-Mark	3273	AM				
MISR	AM	Aerosol Optical Depth	Diner	2299	Hansen	1001	BM	0.05/10% :: 0.05/10% tau=0.02 :: tau=0.02 :: tau=0.02 :: :: 0.10 :: 0.10 10% 0.05 :: 5% 0.02 30% :: 30%	1/orbit, 1/day 1/(5-16 day) [d] 1/wk 1/wk 1/day :: 1/day 1/day	1 km :: Land/L 15.4 km :: G 500 km :: G 500 km :: G 20 km :: G <0.5-1 deg :: G	N/A :: Plume_col Column :: Atmos :: Trop :: Strat 3 km :: 0-15 km
					Hansen	2287	BM				
					Hartmann	1002	BM				
					Dickinson	3383	AM				
					Sellers	2288	AM				
MISR	AM	Pigment Conc, Phytoplankton	Diner	2588*	Wielicki	2289	AM	0.10 :: 0.10 10% 0.05 :: 5% 0.02 30% :: 30% 10% :: 0.1mg 35% :: 10% 30% :: 30% 35% :: 10% 5% :: 2%	1/day 2/day-1/day 1/(1-2 day) [d] 1/day 1/(1-2 day) 1/(1-2 day) [d] 1/(2 day) 1/(5-16 day) [d]	20-50 km :: Ocean/R 240 m :: Ocean/R 1 km :: Ocean [South Atlan] 1-4 km :: Ocean [Southern] 1.92 km :: Ocean/G,R 1-4 km :: Ocean [Southern] 10 km :: Polar 1.92 km :: G	N/A :: Atmos N/A :: TOO N/A :: Sfc N/A :: TOO N/A :: TOO N/A :: Sfc
					Harris	3444	AM				
					Snokosz	2563	AM				
					Abbott	2587	AM				
MISR	AM	Pigment Conc, Phytoplankton	Diner	2589	Abbott	2587	BM	30% :: 30% 10% :: 0.1mg 35% :: 10% 30% :: 30% 35% :: 10% 5% :: 2%	1/(1-2 day) 1/(1-2 day) 1/(2 day) 1/(2 day) 1/(5-16 day) [d]	1.92 km :: Ocean/G,R 1-4 km :: Ocean [Southern] 10 km :: Polar 1.92 km :: G	N/A :: TOO N/A :: TOO N/A :: Sfc
					Robbrock	2590	BM				
					Sellers	2034	BM				
					Wielicki	2043	BM				
MISR	AM	Land_sfc Reflectance, Bi-directional, (BRDF), Diner	Diner	2631	Chlur	3496	BM	5% :: 2% 0.05 :: 0.001 :: :: 3% :: 1%	1/day [d] 1 wk (for 1 yr) :: :: 1/day, 1/season	0.2-2km :: R :: Canada/R :: :: 1.7 km :: Ocean	N/A :: Sfc, Atmos N/A :: Sfc N/A :: Sfc N/A :: Sfc
					Dickinson	3370	AM				
					Dickinson	3371	AM				
					Dickinson	3369	AM				
					Brewer	2426	AM				

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument	Platform	Instrument Output Data Product		IDS Input Requirements		Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
		Product Name	TM	Investigator	Prod # Match Type				
MISR	AM	Land_gf: Reflectance, Bi-directional, (BRDF), Diner							
				Sellers	2041	BM	1/(5-16 day) [d]	250-500 m :: Land	N/A :: Sfc
				Wielicki	2043	BM	1/day [d]	0.2-2km :: R	N/A :: Sfc, Atmos
				Kerr, Sorooshian	2042	BM	1/secs	N/A :: Land	N/A :: Sfc
				Kerr, Sorooshian	2046	BM	1/secs	N/A :: Land	N/A :: Sfc
				Chillar	3496	BM	1 wk (for 1 yr)	:: Canada/R	N/A :: Sfc
				Kerr, Sorooshian	2428	AM	1/2 mo	30 m :: Land/R	:: Sfc
				Brewer	2427	AM	1/day, 1/secs	22 km :: Ocean/L	N/A :: Sfc
MISR	AM	Vegetation Index, Normalized	Diner				1/(5-16 day) [d]	1.92 km :: Land	N/A :: Sfc
				Hansen	2742	AM	1/wk	500 km :: Land	:: Sfc
MISR	AM	Vegetation Index, Normalized	Diner				1/(5-16 day) [d]	240 m :: Land/R	N/A :: Sfc
				Jacks	2743	BM	1 mo	240-500 m :: Land/R	N/A :: Sfc
MISR	AM	Topographic Elevation, Land_gf	Diner				1/mission	500 m :: Land	N/A :: Sfc
				Jacks	2838	BM	1/mission	720 m :: Land/R	N/A :: Sfc
				Kerr, Sorooshian	2826	BM	1/mission	500 m :: Land	N/A :: Sfc
				Moore	2827	BM	1/mission	500 m :: Land	:: Sfc
				Barnes	2823	BM	1/mission	10 km :: Land/R	30 m :: Sfc
				Dickinson	3410	BM	1/mission	Low res :: Land	
				Wielicki	2847	BM	1/mission	10 km :: Land	N/A :: Sfc
				Chillar	3495	AM \$	once	30 m :: Canada/R	10 m :: Sfc
				Mouginis-Mark	3276	AM	1/mission	30 m :: Land/L	N/A :: Sfc
MISR	AM	Eruption-Plume Height	Diner				1/variable [d]	500 m :: Land/L	N/A :: Plume_top
				Mouginis-Mark	3285	BM	1/day	1 km :: Land/R	N/A :: Plume_top
MISR	AM	Aerosol Optical Depth	Diner				9,16 day; mo; seas; yr	15.4 km :: G	Column :: Atmos
				Hansen	1001	BM	1/wk	500 km :: G	:: Trop
				Hartmann	1002	AM	1/day	20 km :: G	3 km :: 0-15 km
							tau=0.02 ::	15.4 km :: G	Column :: Atmos
				Bica	1019	BM	9,16 day; mo; seas; yr	15.4 km :: G	Column :: Atmos
				Hartmann	1020	BM	1/(5-16 day)	15.4 km :: G	Column :: Atmos
				Jacks	1024	AM	1/day	20 km :: G	N/A :: 0-15 km
				Schoeberl	1021	AM	1/wk	2-15 km ::	Column :: Atmos
							10% :: 5%	200 km :: G	1 km :: Strat
MISR	AM	Albedo, Planetary Spectral, TOA	Diner				9,16 day; mo; seas; yr	1.92 km :: G	N/A :: TOA
				Dickinson	3365	AM	<=0.03 :: 0.01	<0.5-1 deg :: G	
MLS	MO	BrO(Br-NI-O) Conc	Waters				1/mo, [z, mean]	0.1 x 2.5 deg :: 82N-82S	2.5 km :: 15-50 km
				Grose	1026	BM	1/wk	30 x 4 dg :: G	3 km :: Strat
				Pyle	1027	BM	2/day	15 x 4 dg :: G	3 km :: Strat
				Schoeberl	1028	BM	1/wk	8 x 10 dg :: G	2 km :: Strat
MLS	MO	CH3Cl Conc	Waters				2/day [d,n]	0.1 x 2.5 deg :: 82N-82S	2.5 km :: TPSE, 40 km
				Grose	1065	BM	1/wk	30 x 4 dg :: G	3 km :: Strat
				Schoeberl	1067	BM	1/wk	8 x 10 dg :: G	3 km :: Strat
				Pyle	1066	BM	2/day	15 x 4 dg :: G	3 km :: Strat
MLS	MO	ClO Conc	Waters				2/day [d,n]	0.1 x 2.5 deg :: 82N-82S	2.5 km :: TPSE, 70 km
				Grose	1105	BM	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
				Schoeberl	1105	BM	1/day	8 x 10 dg :: G	3 km :: Strat
				Pyle	1104	BM	2/day	15 x 4 km :: G	3 km :: Strat
MLS	MO	CO Conc	Waters				2/day [d,n]	0.1 x 2.5 deg :: 82N-82S	2.5 km :: TPSE, 60 km
				Grose	1116	BM	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
				Schoeberl	1121	BM	1/day	8 x 10 dg :: G	3 km :: Mid-atmos

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product														
Instrument	Platforms	Product Name	TM	Prod #	IDS Input Requirements					Accuracy	Temporal	Horizontal	Vertical	
					Investigator	Prod #	Match Type	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.			
MLS	MO	CO Conc	Waters	1124	Pyle	1119	BM	15% :: 5%	2day	15 x 4 km :: G	2 km :: Strat			
					Moore	1118	AM	25% :: 10%	1day	100 km :: G	3 km :: Trop			
					Hansen	1117	AM	0.10% ::	1wk	500 km ::	3 km :: Trop			
MLS	MO	CO Conc	Waters	1125				<=5% :: 1x10-5	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: 60-100 km			
					Groose	1116	BM	15% :: 5%	2day	30 x 4 dg :: G	3 km :: Mid-atmos			
					Schoeberl	1121	BM	15% :: 5	1day	8 x 10 dg :: G	3 km :: Mid-atmos			
MLS	MO	H2O2 Conc	Waters	1171	Pyle	1119	AM	15% :: 5%	2day	15 x 4 km :: G	2 km :: Strat			
								:: 1x10-10	1/day [z, mean]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: 30-40 km			
					Schoeberl	1168	BM	20% :: 1x10-5	1wk	8 x 10 dg :: G	2 km :: Strat			
					Groose	1166	AM	25% :: 10%	2day	30 x 10 dg :: G	3 km :: Strat			
MLS	MO	HCl(H_C1935) Conc	Waters	1188	Pyle	1167	AM	20% :: 10%	2day	15 x 4 km :: G	3 km :: Strat			
								<=5% :: 0.1-10x10-10	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: TPSE, 90 km			
					Groose	1182	BM	15% :: 10%	1day	30 x 4 dg :: G	3 km :: Mid-atmos			
					Schoeberl	1184	BM	15% :: 0.1	1day	4 x 5 dg :: G	2 km :: Strat			
MLS	MO	HCl(H_C1937) Conc	Waters	1189	Pyle	1183	BM	15% :: 5%	2day	15 x 4 km :: G	3 km :: Strat			
					Mouginis-Mark	3283	AM		1day	:: G	N/A :: Plume col			
								<=5% :: 0.1-10x10-10	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: TPSE, 80 km			
					Groose	1182	BM	15% :: 10%	1day	30 x 4 dg :: G	3 km :: Mid-atmos			
					Schoeberl	1184	BM	15% :: 0.1	1day	4 x 5 dg :: G	2 km :: Strat			
MLS	MO	HCN Conc	Waters	1191	Pyle	1183	BM	15% :: 5%	2day	15 x 4 km :: G	3 km :: Strat			
					Mouginis-Mark	3283	AM		1day	:: G	N/A :: Plume col			
								<=5% :: 4x10-11	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: 20-65 km			
MLS	MO	HNO3 Conc	Waters	1203	Schoeberl	1190	BM	20% :: 0.01	1wk	8 x 10 dg :: G	3 km :: Strat			
								<=5% :: 5x10-10	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: TPSE, 46 km			
					Groose	1198	AM	20% :: 5%	2day	30 x 10 dg :: G	3 km :: Mid-atmos			
					Schoeberl	1200	AM	15% :: 0.1	1day	2 x 3 dg :: G	2 km :: Strat			
MLS	MO	H2O2 Conc	Waters	1216	Pyle	1199	AM	15% :: 5%	2day	15 x 4 km :: G	3 km :: Strat			
								:: 3-20x10-10	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: 30-80 km			
					Schoeberl	1214	BM	15% :: 0.02	1day [d]	6 x 8 dg :: G	2 km :: Strat			
					Pyle	1213	BM	25% :: 10%	2day	15 x 4 km :: G	3 km :: Strat			
MLS	MO	HOCl Conc	Waters	1222	Groose	1212	AM	25% :: 10%	2day	30 x 10 dg :: G	3 km :: Mid-atmos			
								:: 3x10-11	1day	0.1 x 2.5 dg :: 82N-82S	2.5 km :: 25-45 km			
					Schoeberl	1220	BM	20% :: 0.02	1wk	8 x 10 dg :: G	3 km :: Strat			
					Pyle	1219	BM	25% :: 10%	2day	15 x 4 km :: G	3 km :: Strat			
MLS	MO	N2O Conc	Waters	1240	Groose	1218	AM	20% :: 10%	2day	30 x 4 dg :: G	3 km :: Strat			
								<=5% :: 1-10x10-8	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 65 km			
					Pyle	1231	BM	15% :: 5%	2day	15 x 4 km :: G	3 km :: Strat			
					Groose	1229	AM	15% :: 5%	1day	30 x 4 dg :: G	3 km :: Mid-atmos			
MLS	MO	NO Conc	Waters	1266	Schoeberl	1232	AM	15% :: 10	1day	2 x 3 dg :: G	2 km :: Strat			
								:: 1-10x10-7	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: 30-120 km			
					Groose	1262	BM	15% :: 5%	2day	30 x 4 dg :: G	3 km :: Mid-atmos			
					Pyle	1263	BM	15% :: 5%	2day	15 x 4 km :: G	3 km :: Strat			
MLS	MO	NO2 Conc	Waters	1274	Schoeberl	1264	BM	15% :: 2x1.0m	1day [d]	4 x 5 dg :: G	2 km :: Mid-atmos			
								:: 1-8x10-8	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: 30-60 km			
					Groose	1269	AM	15% :: 5%	2day	30 x 4 dg :: G	3 km :: Mid-atmos			
					Schoeberl	1271	AM	10% ::	1day	4 x 5 dg :: G	2 km :: Mid-atmos			
					Pyle	1270	AM	15% :: 5%	2day	15 x 4 km :: G	3 km :: Strat			

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product					IDS Input Requirements				Accuracy		Temporal Resolution		Horizontal		Vertical	
Instrument	Platforms	Product Name	TM	Prod #	Investigator	Prod # Match Type	Abs :: Rel									
MLS	MO	O3 Conc	Waters	1319	Schoeberl	1313	BM	<= 3% :: 1%(<50km)			2/day [d,n]		0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 110 km		
					Pyle	1311	BM	10% :: 5%			1/day		2 x 3 dg :: G	1.5 km :: Mid-atmos		
					Bates	1305	AM	5% :: 2%			2/day		15 x 4 km :: G	3 km :: Strat		
					Murakami	1310	AM	5-10% :: 1-5%			2/day		4 x 4 dg :: G	1-1.5 km :: 10-80 km		
					Hansen	1307	AM	10% ::						N/A :: TOA		
					Groce	1306	AM	3% ::			1/wk		500 km :: G	:: Atmos		
								2%,5% :: 2%			2/day		30 x 4 dg :: G	3 km :: Mid-atmos		
					Schoeberl	1313	AM	10% :: 5%			2/day [d,n]		0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: 20-60 km		
								:: 10%			1/day		2 x 3 dg :: G	1.5 km :: Mid-atmos		
					Schoeberl	1313	AM	10% :: 5%			2/day [d,n]		0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 70 km		
MLS	MO	O3 Conc	Waters	1328	Hansen	1307	AM	10% :: 5%			1/day		2 x 3 dg :: G	1.5 km :: Mid-atmos		
								3% ::			1/wk		500 km :: G	:: Atmos		
					Schoeberl	1342	BM	10% :: 10%			2/day [d,n]		0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: 20-60 km		
								:: 20%			1/wk		8 x 10 dg :: G	5 km :: Strat		
					Schoeberl			3% 10-11			1/mo [t, mean]		0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 25 km		
					Schoeberl	1351	AM	20% :: 0.01			1/wk [n]		8 x 10 dg :: G	3 km :: Strat		
					Groce	1349	AM	20% :: 10%			2/day		30 x 4 dg :: G	3 km :: Strat		
					Pyle	1350	AM	25% :: 10%			2/day		15 x 4 km :: G	3 km :: Strat		
								:: 5% 10-10			2/day [d,n]		0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 30 km		
					Schoeberl	1366	BM	20% ::			1/wk		8 x 10 dg :: G	3 km :: Strat		
MLS	MO	OCIO Conc	Waters	1352	Mouginis-Mark	3288	AM				[near-real time ?]		1 km :: G	N/A :: Plume_col		
					Mouginis-Mark	3289	AM				1/day		1 km :: G	N/A :: Plume_col		
					Groce	1516	AM				2/day [d,n]		0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 70 km		
								:: 1% (30-50km)			2/day		15 x 4 dg :: G	3 km :: Mid-atmos		
					Bates	1569	AM \$	0.05 :: 2%			2/day [d,n]		0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 120 km		
								:: 2K <100km					1.8 x 16 dg :: G	3 km :: 20-60 km		
					Bates	1570	AM	1K,2K>50km :: 3:1K>50km			2/day		4 x 4 dg :: G	1-1.5 km :: 10-80 km		
					Hansen	1573	AM	0.3 C ::			1/wk		500 km :: G	:: Strat		
					Schoeberl	1582	AM	2 K :: 1 K			1/day		2 x 2 dg :: G	2 km :: Atmos		
					Groce	1572	AM	2 K :: 0.5 K			2/day		15 x 4 dg :: G	2 km :: Mid-atmos		
MLS	MO	SO2 Conc	Waters	1369	Pyle	1581	AM	2 K :: 0.5 K			2/day		15 x 4 km :: G	2 km :: Strat		
								:: 10m/s			2/day [d,n]		0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: 60-110 km		
					Pyle	1714	BM	5 m/s :: 5 m/s			2/day		15 x 4 km :: G	2 km :: Strat		
					Groce	1662	AM \$	5m/s, 10dg :: 5m/s, 5dg			2/day		15 x 4 dg :: G	2 km :: Mid-atmos		
								:: 2% <50km			2/day [d,n]		0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 100 km		
					Schoeberl	1821	BM	10% :: 5%,0.05s			1/day		2 x 3 dg :: G	1.5 km :: 0-Strat		
					Hansen	1864	AM	3% ::			1/wk		500 km :: G	Columbia :: Strat		
					Schoeberl	1822	AM	10% :: 0.05			1/day		4 x 5 dg :: G	2.5 km :: Mesos		
					Hansen	1812	AM	3% ::			1/wk		500 km :: G	:: Atmos		
					Groce	1811	AM	15% :: 5%			2/day		30 x 4 dg :: G	3 km :: Trop/meso		
MLS	MO	H2O Conc	Waters	1838	Bates	1808	AM	5-10% :: 1-5%			2/day		4 x 4 dg :: G	1-1.5 km :: 10-80 km		
					Pyle	1819	AM	10% :: 5%			2/day		15 x 4 km :: G	3 km :: Strat		
								:: 5%			1/day [t, mean]		0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: Upper Trop		
					Dickinson	3357	AM						<0.5-1 dg :: G			
					Bates	1894	AM	75% ::			1/6 hr		1 x 1 dg :: G	1yr :: 0-30 km		
								50-100% :: 35%			1/day, 1/wk		1 km :: Ocean/R/L	N/A :: TOO		
					Harris	3454	BM	40% :: 20%			2-10 days		0.25-1 km :: Ocean/R			
					Harris	3455	AM	20-30% :: 10-15%			1/day		1-20 km :: Ocean/R			
MODIS	AM/PM	Chlorophyll_a Conc (via Fluorescence)	Abbott	2566*												

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product				IDS Input Requirements			Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.	
Instrument	Platforms	Product Name	TM	Prod #	Investigator	Prod #	Match Type	Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
MODIS	AM,PM	Chlorophyll_a Conc (via Fluorescence)	Abbott	2566*	Srokosz	2563	AM	10% :: 0.1mg 50-100% :: 35%	1/day 1/day, 1/wk	1 km :: Ocean [South Atlan] 4 km :: Ocean/G,R	N/A :: Sfc N/A :: TOO
MODIS	AM,PM	Chlorophyll_a Conc (via Fluorescence)	Abbott	2567*	Harris	3455	AM	20-30% :: 10-15% .004 :: .001	1/day 1/day, 1/wk	1-20 km :: Ocean/R 4 km :: Ocean/G,R	N/A :: TOO
MODIS	AM,PM	Chlorophyll Fluorescence Line Height	Abbott	2575	Harris	3462	BM	25% :: 5% .004 :: .001	1/day 1/day, 1/wk	1-20 km :: Ocean/R 1 km :: Ocean/R,L	N/A :: TOO
MODIS	AM,PM	Chlorophyll Fluorescence Line Height	Abbott	2576	Harris	3462	BM	25% :: 5% :: 50-100%	1/day 1/day, 1/wk	1 km :: Ocean/R 1 km :: Ocean/I,R,L	N/A :: TOO
MODIS	AM,PM	Ocean Productivity, Primary, Near_sfc (via Abbott)		2602*	Abbott	2597	BM	:: 50-100%	1/day, 1/wk 1/(1-2 day)	1 km :: Ocean [Southern] 1-4 km :: Ocean	N/A :: TOO
MODIS	AM,PM	Ocean Productivity, Primary, Near_sfc (via Abbott)		2603*	Harris	3460	BM	30% :: 5% :: 50-100%	1/day 1/day, 1/wk	1-20 km :: Ocean/R 4 km :: Ocean/I,G,R	N/A :: TOO
MODIS	AM,PM	Land_sfc Emissivity	Barton	2110*	Hansen	2512	AM	0.2 C :: 0.01 :: 0.01	1/wk 1/day, 1/wk	500 km :: Ocean 1 km :: G,R	:: Sfc N/A :: Sfc
MODIS	AM,PM	Land_sfc Emissivity	Barton	2111*	Chilar	3487	AM	0.025 :: 0.025 0.01 :: 0.01	10 day 1/day, 1/wk	1.25 deg :: Canada/R 50 km :: G,R	N/A :: Sfc N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2527	Dickinson	3373	BM	0.025 :: 0.025	10 day	<0.5-1 deg :: Land	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2527	Chilar	3487	BM	0.025 :: 0.025	2/day [d,n]	1.25 dg :: Land	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2527	Wielicki	2120	BM	0.3-0.5 K :: 0.1-0.3 K	1/day, 1/wk, 1/mo	1 km :: Ocean/L	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2527	Abbott	2504	BM	0.5 K :: 0.05 K	(1-2)/day	1-4 km :: Ocean [Southern]	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2527	Harris	3451	BM	0.5-1 K :: 0.2-0.3 K	1/day	0.25-1 km :: Ocean/R	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2527	Srokosz	2520	BM	0.3 K(IR) :: 0.1 K	2/day	100-1 km :: Ocean [South Atlan]	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2527	Kerr, Sorooshian	1631	AM	1 K :: 1 K	2/day [d,n]	500 m :: Land/R	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2527	Hansen	2512	AM	0.2 C ::	1/wk	500 km :: Ocean	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2527	Hartmann	2513	AM	0.5 K :: 0.5 K	1/day	10 km :: Ocean	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2527	Liu	2517	AM	0.5 :: 0.5	1/wk	10 km :: G	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2527	Lau	2515	AM	0.2 K :: 0.2 K	1/wk	200 km :: Ocean	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2528	Bates	2508	BM	0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G,R	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2528	Brewer	2511	BM	0.3-0.6 K :: 0.1-0.3 K	1/day, 1/wk, 1/mo	20 km :: Ocean/G,R	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2528	Harris	3452	BM	0.5 K :: 0.5 K	1/day, 1/season	20 km :: Ocean	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2528	Murakami	2518	BM	0.5-1 K :: 0.2-0.3 K	1/day	20 km :: Ocean/R	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2528	Rothrock	2519	BM	0.2 K ::		:: G	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2528	Hansen	2512	BM	1 K :: 1 K	1/(2 day)	30 km :: G	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2528	Hansen	2512	BM	0.2 C ::	1/wk	500 km :: Ocean	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2529	Abbott	2505	AM	1 K :: 0.1 K	(1-2)/day	50 km :: Ocean [Southern]	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2529	Barton	2506	AM	0.5 K ::	1/day	100 km :: Ocean	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2529	Lau	2514	AM	0.5 K ::	1/wk	100 km :: Ocean	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2529	Lau	2516	AM	0.5 K ::	1/wk	50 km :: R	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2529	Lau	2515	AM	0.2 K :: 0.2 K	1/wk	200 km :: Ocean	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2529	Wielicki	2521	AM	1 K :: 0.5 K	1/wk	1.25 dg :: Ocean	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2529	Bates	2509	AM	0.5 K :: 0.4 K	2/day [d,n]	50 km :: Ocean	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2529	Barton	2507	AM	0.5 K ::	1/day	10 km :: Ocean/R	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2529	Hartmann	2513	AM	0.5 K :: 0.5 K	1/day	10 km :: Ocean	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2529				0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	4 km :: Ocean/R,L	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2529	Abbott	2504	BM	0.5 K :: 0.05 K	(1-2)/day	1-4 km :: Ocean [Southern]	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2529	Barton	2507	BM	0.5 K ::	1/day	10 km :: Ocean/R	N/A :: Sfc
MODIS	AM,PM	Sea_sfc Temperature (SST)	Brown	2529	Hartmann	2513	BM	0.5 K :: 0.5 K	1/day	10 km :: Ocean	N/A :: Sfc

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument			Instrument Output Data Product		IDS Input Requirements		Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type				
MODIS	Sea_sfc Temperature (SST)	Brown	2529	Liu	2517	BM	0.5 K :: 0.5	1/wk	10 km :: G	N/A :: Sfc
				Brewer	2511	AM	0.5 K :: 0.5 K	1/day, 1/wk	20 km :: Ocean	N/A :: Sfc
				Hansen	2512	AM	0.2 C ::	1/wk	500 km :: Ocean	:: Sfc
				Srokosz	2520	AM	0.3 K(RR) :: 0.1 K	2/day	100-1 km :: Ocean [South Allen]	N/A :: Sfc
							0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	4 km :: Ocean/R/L	N/A :: Sfc
MODIS	Sea_sfc Temperature (SST)	Brown, Barton	2530	Abbott	2504	BM	0.5 K :: 0.05 K	(1-2)/day	1-4 km :: Ocean [Southern]	N/A :: Sfc
				Barron	2507	BM	0.5 K ::	1/day	10 km :: Ocean/R	N/A :: Sfc
				Liu	2517	BM	0.5 K :: 0.5	1/wk	10 km :: G	N/A :: Sfc
				Hartmann	2513	BM	0.5 K :: 0.5 K	1/day	10 km :: Ocean	N/A :: Sfc
				Dickinson	3392	AM	0.2 C ::		<0.5-1 deg :: Ocean	:: Sfc
MODIS	Sea_sfc Temperature (SST)	Brown, Barton	2531	Hansen	2512	AM	0.2 C ::	1/wk	500 km :: Ocean	:: Sfc
				Srokosz	2520	AM	0.3 K(RR) :: 0.1 K	2/day	100-1 km :: Ocean [South Allen]	N/A :: Sfc
							0.3-0.6K :: 0.1-0.3K	1/day, 1/wk, 1/mo	20 km :: Ocean/G/R	N/A :: Sfc
				Bates	2508	BM	0.3-0.6 K :: 0.1-0.3 K	1/day, 1/wk, 1/mo	20 km :: Ocean/G/R	N/A :: Sfc
				Brewer	2511	BM	0.5 K :: 0.5 K	1/day, 1/wk	20 km :: Ocean	N/A :: Sfc
MODIS	Sea_sfc Temperature (SST)	Brown, Barton	2532	Harris	3452	BM	0.5-1 K :: 0.2-0.3 K	1/day	20 km :: Ocean/R	N/A :: Sfc
				Murkemi	2518	BM	0.2 K ::		:: G	N/A :: Sfc
				Robrock	2519	BM	1 K :: 1 K	1/(2 day)	30 km :: G	N/A :: Sfc
				Hansen	2512	BM	0.2 C ::	1/wk	500 km :: Ocean	:: Sfc
				Abbott	2505	AM	1 K :: 0.1 K	(1-2)/day	50 km :: Ocean [Southern]	N/A :: Sfc
MODIS	Sea_sfc Temperature (SST)	Brown, Barton	2533	Barron	2506	AM	0.5 K ::	1/day	100 km :: Ocean	N/A :: Sfc
				Dickinson	3392	AM	0.2 K ::		<0.5-1 deg :: Ocean	N/A :: Sfc
				Lau	2514	AM	0.5 K ::	1/wk	100 km :: Ocean	N/A :: Sfc
				Lau	2516	AM	0.5 K ::	1/day	50 km :: R	N/A :: Sfc
				Lau	2515	AM	0.2 K :: 0.2 K	1/wk	200 km :: Ocean	N/A :: Sfc
MODIS	Sea_sfc Temperature (SST)	Brown, Barton	2534	Wielicki	2521	AM	1 K :: 0.5 K	1/wk	1.25 deg :: Ocean	N/A :: Sfc
				Bates	2509	AM	0.5 K :: 0.4 K	2/day (d.n)	50 km :: Ocean	N/A :: Sfc
				Barron	2507	AM	0.5 K ::	1/day	10 km :: Ocean/R	N/A :: Sfc
							0.1-0.4K :: 0.1-0.6K	1/day, 1/wk, 1/mo	50 km :: Ocean	N/A :: Sfc
				Abbott	2505	BM	1 K :: 0.1 K	(1-2)/day	50 km :: Ocean [Southern]	N/A :: Sfc
MODIS	Sea_sfc Temperature (SST)	Brown, Barton	2535	Dickinson	3392	BM			<0.5-1 deg :: Ocean	N/A :: Sfc
				Lau	2516	BM	0.5 K ::	1/day	50 km :: R	N/A :: Sfc
				Murkemi	2518	BM	0.2 K ::		:: G	N/A :: Sfc
				Barron	2506	BM	0.5 K ::	1/day	100 km :: Ocean	N/A :: Sfc
				Wielicki	2521	BM	1 K :: 0.5 K	1/wk	1.25 deg :: Ocean	N/A :: Sfc
MODIS	Sea_sfc Temperature (SST)	Brown, Barton	2536	Hansen	2512	BM	0.2 C ::	1/wk	500 km :: Ocean	:: Sfc
				Lau	2514	BM	0.5 K ::	1/wk	100 km :: Ocean	N/A :: Sfc
				Lau	2515	BM	0.2 K :: 0.2 K	1/wk	200 km :: Ocean	N/A :: Sfc
				Robrock	2519	AM	1 K :: 1 K	1/(2 day)	30 km :: G	N/A :: Sfc
				Bates	2509	AM	0.5 K :: 0.4 K	2/day (d.n)	50 km :: Ocean	N/A :: Sfc
MODIS	Chlorophyll a Conc	Corder	2537				50% :: 10%	1/day, 1/wk, 1/mo	1 km :: Ocean-III L	N/A :: TOO
				Srokosz	2563	AM	10% :: 0.1mg	1/day	1 km :: Ocean [South Allen]	N/A :: Sfc
							50% :: 10%	1/day, 1/wk, 1/mo	1 km :: Ocean-III/G/R	N/A :: TOO
				Harris	3454	BM	40% :: 20%	2-10 days	0.25-1 km :: Ocean/R	
				Harris	3455	BM	20-30% :: 10-15%	1/day	1-20 km :: Ocean/R	
MODIS	Chlorophyll a Conc	Corder	2570	Harris	3456	BM	20-30% :: 10-15%	2-10 days	0.25-1 km :: Ocean/R	
				Srokosz	2563	AM	10% :: 0.1mg	1/day	1 km :: Ocean [South Allen]	N/A :: Sfc

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument	Platform	Instrument Output Data Product			IDS Input Requirements			Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
		Product Name	TM	Prod #	Investigator	Prod #	Match Type				
MODIS	AM/PM	Organic Matter Conc, Dissolved	Corder	2580*	Brewer	2561	BM	150% :: 30%	1/day, 1/wk, 1/mo	20 km :: Ocean	N/A :: TOO
					Harris	3457	BM	100% :: 10%	1/day, 1/week	20 km :: Ocean	N/A :: TOO
					Brewer	2511	AM	100% :: 30%	1/day	1-20 km :: Ocean/R	N/A :: TOO
MODIS	AM/PM	Organic Matter Conc, Dissolved	Corder	2581*				0.5 K :: 0.5 K	1/day, 1/week	20 km :: Ocean	N/A :: Sfc
					Abbott	2579	BM	150% :: 30%	1/day, 1/wk, 1/mo	1 km :: Ocean/R/L	N/A :: TOO
					Harris	3457	BM	50% :: 20%	1/(1-2 day)	1.4 km :: Ocean [Southern]	N/A :: TOO
								100% :: 30%	1/day	1-20 km :: Ocean/R	N/A :: TOO
MODIS	AM/PM	Ocean Water Attenuation Coef, PAR	Clark	2031*				35% :: 10%	1/day, 1/wk	1 km :: Ocean-I/L	N/A :: TOO
					Abbott	3204	BM	20% :: 5%	1/(1-2 day)	1.4 km :: Ocean [Southern]	N/A :: TOO
MODIS	AM/PM	Ocean Water Attenuation Coef, PAR	Clark	2032*				35% :: 10%	1/day, 1/wk	20 km :: Ocean-I	N/A :: TOO
					Brewer	3202	BM	25% :: TBD	1/day, 1/week	20 km :: Ocean	N/A :: Sfc
MODIS	AM/PM	Chlorophyll a Conc	Clark	2571				30% :: 10%	1/day, 1/wk, 1/mo	1 km :: Ocean-I/L	N/A :: TOO
								20-30% :: 10-15%	1/day	1-20 km :: Ocean/R	N/A :: Sfc
					Harris	3455	BM	10% :: 0.1mg	1/day	1 km :: Ocean [South Atlnt]	N/A :: Sfc
MODIS	AM/PM	Chlorophyll a Conc	Clark	2572	Srokosz	2563	BM	30% :: 10%	1/day, 1/wk, 1/mo	20 km :: Ocean-I/G,R	N/A :: TOO
								20-30% :: 10-15%	1/day	1-20 km :: Ocean/R	N/A :: TOO
MODIS	AM/PM	PAR	Estas	2330*	Harris	3455	BM	TBD :: TBD	1/day	N/A :: G	N/A :: Atmos
					Moore	2329	AM	20% :: 10%	1/day, 1/wk	500 m :: Land/R	N/A :: TOO
MODIS	AM/PM	Ocean Productivity, Primary	Estas	2066				<35% :: <20%	1/wk, 1/mo, 1/yr	20 km :: Ocean/G,R	N/A :: TOO
					Harris	3460	BM	30% :: 5%	1/day	1-20 km :: Ocean/R	N/A :: TOO
					Brewer	2599	AM \$	50% :: 5%	1/day, 1/week	20 km :: Ocean	N/A :: TOO
MODIS	AM/PM	PAR, Sfc (IPAR)	Gordon	2267				10% :: 5%	1/day [d]	1 km :: Ocean	N/A :: Sfc
					Abbott	2269	BM	5% :: 1%	1/(1-2 day)	1.4 km :: Ocean [Southern]	N/A :: Sfc
					Brewer	2279	BM-	20% :: 5%	1/day, 1/week	20 km :: Ocean	N/A :: Sfc
					Brewer	2280	BM-	20% :: 5%	1/day, 1/week	30 m :: Ocean/L	N/A :: Sfc
					Harris	3443	AM-	5% :: 2%	2/day	20-50 km :: Ocean/R	N/A :: Atmos
MODIS	AM/PM	Aerosol Angstrom Exponent	Gordon	2295				15% :: 5%	1/day, 1/wk, 1/mo	1 km :: Ocean/R/L	N/A :: Atmos
					Harris	3442	BM	15% :: 5%	1/day	1-20 km :: Ocean/R	N/A :: Atmos
MODIS	AM/PM	Aerosol Angstrom Exponent	Gordon	2296				15% :: 5%	1/day, 1/wk, 1/mo	20 km :: Ocean	N/A :: Atmos
					Harris	3442	BM	15% :: 5%	1/day	1-20 km :: Ocean/R	N/A :: Atmos
MODIS	AM/PM	Aerosol Radiance	Gordon	2344				10% :: 5%	1/day, 1/wk, 1/mo	1 km :: Ocean/G,R,L	N/A :: Atmos
					Harris	3446	BM	10% :: 5%	1/day	1-20 km :: Ocean/R	N/A :: Atmos
MODIS	AM/PM	Aerosol Radiance	Gordon	2345				10% :: 5%	1/day, 1/wk, 1/mo	20 km :: Ocean/G,R,L	N/A :: Atmos
					Dickinson	3368	BM			<0.5-1 deg :: G	N/A :: Atmos
MODIS	AM/PM	Phytoplankton Backscatter Coef	Gordon	2555*	Harris	3446	BM	10% :: 5%	1/day	1-20 km :: Ocean/R	N/A :: Sfc
					Cihlar	3494	BM	5% :: 10%	once	250-1000 m :: Canada/R	N/A :: Sfc
MODIS	AM/PM	Level-2 Radiance, Water-leaving	Gordon et al	2416	Abbott	3209	BM	50% :: 20%	1/day, 1/wk, 1/mo	1 km :: Ocean/R	N/A :: TOO
								5% :: 5%	1/day	1-4 km :: Ocean	N/A :: N/A
MODIS	AM/PM	Level-2 Radiance, Water-leaving	Gordon et al	2417	Harris	3447	BM	10% :: 5%	1/day, 1/wk, 1/mo	1 km :: Ocean/R/L	N/A :: Sfc
					Berrou	2238	AM(-:-)	10% :: 5%	1/day	1-20 km :: Ocean/R	N/A :: Sfc
					Brewer	2415	AM	10% :: 5%	1/day	10 km :: R	N/A :: Sfc
MODIS	AM/PM	Level-2 Radiance, Water-leaving	Gordon et al	2417				5% :: 5%	1/day, 1/week	20 km :: Ocean	N/A :: Sfc
					Brewer	2415	BM	10% :: TBD	1/day, 1/wk, 1/mo	20 km :: Ocean/G,R	N/A :: Sfc
					Harris	3447	BM	10% :: 5%	1/day	20 km :: Ocean	N/A :: Sfc
					Berrou	2187	BM-	10% :: 5%	1/day	1-20 km :: Ocean/R	N/A :: Sfc
								10 :: 5	1/day	10 km :: R	N/A :: Sfc
								10 :: 5	1/day	10 km :: R	N/A :: Sfc

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument	Instrument Output Data Product			IDS Input Requirements		Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
	Platform	Product Name	TM	Prod #	Investigator	Prod # Match Type			
MODIS	AM,PM	Pigment Conc	Gordon, Clark	2591	Harris	3458 BM	1/day, 1/wk, 1/mo	20 km :: Ocean/G.R	N/A :: TOO
					Hansen	3077 BM	1/wk	1-20 km :: Ocean/R	:: TOO
					Abbott	2587 AM	1/(1-2 day)	1-4 km :: Ocean [Southern]	N/A :: TOO
					Rothrock	2590 AM	1/(2 day)	10 km :: Polar	N/A :: TOO
					Abbott	2587 BM	1/(1-2 day)	1 km :: Ocean/R,L	N/A :: TOO
MODIS	AM,PM	Pigment Conc	Gordon, Clark	2592	Harris	3458 BM	1/day	1-4 km :: Ocean [Southern]	N/A :: TOO
					Rothrock	2590 AM	1/(2 day)	1-20 km :: Ocean/R	N/A :: TOO
					Harris	3461 BM	1/day, 1/wk, 1/mo	10 km :: Polar	N/A :: TOO
					Harris	3461 BM	1/day	20 km :: Ocean-II R,L	N/A :: TOO
					Abbott	3204 AM	1/day, 1/wk, 1/mo	1 km :: Ocean-I R,L	N/A :: TOO
MODIS	AM,PM	Ocean Water Attenuation Coef@490nm	Gordon, Clark	3199	Richy, Batista	3203 AM \$	1/(1-2 day)	1-4 km :: Ocean [Southern]	N/A :: TOO
					Harris	3462 BM	1/wk	1 km :: Land/R	N/A :: TOO
					Harris	3458 BM	1/day	1 km :: Ocean/R	N/A :: TOO
					Harris	3458 BM	1 day, 1/wk, 1/mo	1-20 km :: Ocean/R	N/A :: TOO
					Harris	3458 BM	1 day	20 km :: Ocean/G.R	N/A :: TOO
MODIS	AM,PM	Pigment Conc, Phycobillin [Phycocerythrin, et Hoge	Gordon, Clark	3319*	Harris	3458 BM	1 day, 1/wk, 1/mo	1-20 km :: Ocean/R	N/A :: TOO
					Harris	3458 BM	1 day	1 km :: Ocean/R,L	N/A :: TOO
					Harris	3459 BM	1 day	1-20 km :: Ocean/R	N/A :: TOO
					Harris	3458 BM	2-10 days	0.25-1 km :: Ocean/R	N/A :: TOO
					Harris	3458 BM	1/day, 1/wk	1 km :: Ocean/R	N/A :: TOO
MODIS	AM,PM	Pigment Conc [via Spectral Curv]	Hoge, Esaiasz	2593*	Harris	3458 BM	1/day	1-20 km :: Ocean/R	N/A :: TOO
					Harris	3458 BM	1 day	20 km :: Ocean/R	N/A :: TOO
					Hansen	3077 BM	1/day	1-20 km :: Ocean/R	N/A :: TOO
					Hansen	3077 BM	1/wk	500 km :: Ocean	:: TOO
					Ciblar	3491 BM	1/mo	1 km :: Land/R	N/A :: S/c
MODIS	AM,PM	Soil Brightness Index	Huete	2047	Barron	2796 AM-	1 wk	1 km :: Canada/R	N/A :: S/c
					Barron	2796 AM-	1/mision	10 km :: Land/R	N/A :: S/c
					Barron	2794 AM-	1/mo	1 km :: Land/R	N/A :: S/c
					Barron	2796 AM-	1/mision	100 km :: Land	N/A :: S/c
					Barron	2796 AM-	1/mision	10 km :: Land/R	N/A :: S/c
MODIS	AM,PM	Land_gf: Temperature-Difference, Day-Night Huete	Huete	2537*	Dickinson	3395 BM	1 day	856 m :: R	N/A :: S/c
					Bates	2538 AM	1 day	<0.5-1 deg :: O	N/A :: S/c
					Bates	2538 AM	1 day	50 km :: Land	N/A :: S/c
					Murkeni	2745 BM	1/day, 1/wk, 1/mo	10 km :: Land	N/A :: S/c
					Barron	2716 BM	1/yr	:: Land	N/A :: S/c
MODIS	AM,PM	Vegetation Index	Justice, Huete et al	2749	Simard	2720 BM	1/yr	10 km :: Land/R	N/A :: S/c
					Barron	2717 BM	1/yr	:: Canada/R	N/A :: S/c
					Hansen	2718 BM	1/wk	100 km :: Land	N/A :: S/c
					Hansen	2718 BM	1/wk	500 km :: Land	:: S/c
					Hansen	2718 BM	1/wk	500 km :: Land	:: S/c

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument			Instrument Output Data Product			IDS Input Requirements			Accuracy	Temporal	Horizontal	Vertical
Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.
MODIS	AM PM	Vegetation Index	Justice, Huete et al 2749	Hansen	2742	BM	5% ::	1/wk	500 km :: Land	Med-low_res :: Land		:: Sfc
				Dickinson	3401	AM						
				Sinard	2788	AM	10% ::					N/A :: Sfc
				Hansen	2731	AM	5% ::	1/wk	500 km :: Land	:: Canada/R		:: Sfc
MODIS	AM PM	Vegetation Index	Justice, Huete et al 2750				0.01 :: 0.01	1/day, 1/wk, 1/mo	0.5 km :: Land/R			N/A :: Sfc
				Moore	2736	AM	15% :: 15%	1/yr	1 km :: Land			:: Sfc
				Isacks	2719	AM		1/yr	1 km :: Land/R			N/A :: Sfc
				Isacks	2743	AM	1 :: 1	1/mo	240-500 m :: Land/R			N/A :: Sfc
				Cihlar	3504	AM	15% :: 15%	once	100 m :: Canada/R			N/A :: Sfc
MODIS	AM PM	Vegetation Index	Justice, Huete et al 2751				0.01 :: 0.01	1/day, 1/wk, 1/mo	1 km :: Land/R			N/A :: Sfc
				Dickinson	3401	BM			Med-low_res :: Land			
				Isacks	2719	AM		1/yr	1 km :: Land/R			N/A :: Sfc
				Moore	2736	AM	15% :: 15%	1/yr	1 km :: Land			:: Sfc
				Moore	2721	AM	15% :: 15%	1/yr	1 km :: Land			:: Sfc
MODIS	AM PM	Land_gf Reflectance, Directional	Kaufman et al 2429				0.01 :: 0.005	1/day	1 km :: G			N/A :: Sfc
				Cihlar	3500	BM	0.05 :: 0.001	1 day	250-1000 m :: Canada/R			N/A :: Sfc
				Brewer	2426	AM	3% :: 1%	1/day, 1/yr	1.7 km :: Ocean			N/A :: Sfc
				Sellers	2034	AM						
MODIS	AM PM	Land_gf Reflectance, Directional	Kaufman et al 2430				0.01 :: 0.005	1/day	0.5 km :: G			N/A :: Sfc
				Cihlar	3500	BM	0.05 :: 0.001	1 day	250-1000 m :: Canada/R			N/A :: Sfc
				Sellers	2041	AM			250-500 m :: Land			
MODIS	AM PM	Land_gf Reflectance, Directional	Kaufman et al 2431				0.01 :: 0.005	1/day	0.25 km :: G			N/A :: Sfc
				Brewer	2427	BM	3% :: 1%	1/day, 1/yr	22 km :: Ocean/L			N/A :: Sfc
				Cihlar	2437	BM	0.05 :: 0.001	1/3 mo	0.25 km :: Canada/R			N/A :: Atmos
				Cihlar	3500	BM	0.05 :: 0.001	1 day	250-1000 m :: Canada/R			N/A :: Sfc
				Sellers	2041	AM			250-500 m :: Land			
MODIS	AM PM	Fire Temperature	Kaufman, Justice 2471				10 C :: 5 C	1/day, 1/wk	1 km :: Land/R			N/A :: Sfc
				Hansen	2662	AM	10% ::	1/wk	500 km :: Land			:: Sfc
MODIS	AM PM	Fire Count	Kaufman, Justice 2663					1/day, 1/wk	1 km :: Land/R			N/A :: Sfc
				Hansen	2662	AM	10% ::	1/wk	500 km :: Land			:: Sfc
MODIS	AM PM	Fire Count	Kaufman, Justice 2664					1/day, 1/wk	10 km :: Land			N/A :: Sfc
				Hansen	2662	BM	10% ::	1/wk	500 km :: Land			N/A :: Sfc
MODIS	AM PM	Fire Extent	Kaufman, Justice 2665					1/day, 1/wk	1 km :: Land/R			N/A :: Sfc
				Hansen	2662	AM	10% ::	1/wk	500 km :: Land			:: Sfc
MODIS	AM PM	Fire Extent	Kaufman, Justice 2666					1/day, 1/wk	1 deg :: Land			N/A :: Sfc
				Dickinson	3398	BM			<0.5-1 deg :: Land			
				Hansen	2662	BM	10% ::	1/wk	500 km :: Land			:: Sfc
MODIS	AM PM	Fire Class	Kaufman, Justice 2711				10 C :: 5 C	1/day, 1/wk	10 km :: Land			N/A :: Sfc
				Hansen	2662	AM	10% ::	1/wk	500 km :: Land			:: Sfc
MODIS	AM PM	Aerosol Mass Loading	Kaufman, Tanre 1017				30% :: 10%	1/day, 1/mo	0.5 deg :: G/R			N/A :: Atmos
				Hansen	2662	AM			50 km :: Ocean/R			
				Harris	3424	BM	1% :: 1%	1/day	1 km :: Land/R			N/A :: Plume_col
				Mouginis-Mark	3282	BM		1/day	1 km :: Land/R			N/A :: Atmos
				Isacks	1016	BM	30% :: 10%	1/wk	1-10 km :: Land/R			N/A :: Atmos
							8% :: 6%	1/day	5 km :: Land			N/A :: Atmos
MODIS	AM PM	Precipitable Water	Kaufman, Tanre 1874				3% :: 1%	1/day	10 km :: R			Column :: Trop
				Barron	1860	BM		1/day				
				Murakami	1867	AM	20% ::					Column :: Trop
				Abbott	1858	AM	10% :: 5%	1/1-2 day	25 km :: Ocean [Southern]			Column :: Trop
				Bates	1862	AM	5% :: 3%	2/day [d.n]	50 km :: G			N/A :: Trop

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product				IDS Input Requirements			Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Instrument	Platform	Product Name	TM	Prod #	Investigator	Prod # Match Type				
MODIS	AM/PM	Precipitable Water	Kaufman, Tanre	1874	Kerr, Sorooshian	1865	AM	2/day	50 km :: Land	Column :: Atmos
MODIS	AM/PM	Aerosol Optical Depth, Spectral	Kaufman, Tanre	2293	Dickinson	3383	BM	1/day, 1/mo	0.5 dg :: Land	N/A :: Atmos
					Sellers	2288	BM			
					Sellers	1004	BM			
					Isaacs	2326	AM	1/wk	10-50 km :: Land/R	Column :: Atmos
					Hansen	1001	AM-	1/wk	500 km :: G	:: Trop
					Wielicki	2289	AM	1/day	1.25 dg :: G	N/A :: Atmos
					Hansen	2287	AM	1/wk	500 km :: G	:: Strat
					Kerr, Sorooshian	2325	AM	1/(5-16 day)	10 km :: Land/R	:: Atmos
					Hartmann	1002	AM	1/day	20 km :: G	3 km :: 0-15 km
					Pyle	1003	AM	2/day	:: G	:: Strat
MODIS	AM/PM	Level-2 Radiance, Land, leaving	Kaufman, Tanre	2380				1/day, 1/mo	10 km :: Land	N/A :: Sfc
					Barron	2187	BM-	1/day	10 km :: R	N/A :: Sfc
					Barron	2238	BM-	1/day	10 km :: R	N/A :: Sfc
MODIS	AM/PM	Precipitable Water	Kaufman, Tanre	3321				1 day, mo	1 km :: Land	N/A :: Atmos
					Richey, Batista	1863	BM	1/wk	1 km :: R	Column :: Trop
					Richey, Batista	1810	AM	1/day	:: R	:: Trop
					Barron	1860	AM	1/day	10 km :: R	Column :: Trop
MODIS	AM/PM	Precipitable Water	Kaufman, Tanre	3322	Kerr, Sorooshian	1865	AM	2/day	50 km :: Land	Column :: Atmos
								1 day, mo	1 dg :: Land	N/A :: Atmos
					Barron	1861	BM	1/day	100 km :: G	Column :: Trop
					Dickinson	3355	BM	1/day	<0.5-1 dg :: G	
MODIS	AM/PM	Cloud Cover	King	2081				2/day [d,n], 1/mo	5 km :: G	N/A :: Cloud
					Barron	2050	BM	1/day	10 km :: R	N/A :: Cloud
					Dickinson	3344	BM		Med_res :: G	
					Harris	3436	BM	2/day	5-50 km :: Ocean/R	
					Liu	2055	BM		:: Ocean	
					Simard	2056	BM		5% ::	N/A :: Cloud
					Srokosz	2060	BM	2/day	10 km :: Ocean (South Atlan)	N/A :: Cloud
					Kerr, Sorooshian	2075	BM	1/day	10 km :: Land/R	N/A :: Cloud
					Moore	2057	BM	1/wk	1 km :: G	
					Isaacs	2053	BM	1/wk	5 km :: Land/R	N/A :: Cloud
					Murkumi	2058	AM		10% ::	N/A :: Cloud
					Bates	2072	AM \$	2/day [d,n]	15 x 45 km :: G	N/A :: Cloud
					Hansen	2052	AM	1/wk	500 km :: G	:: Cloud
					Barron	2049	AM	1/day	100 km :: G	N/A :: Cloud
					Lau	2054	AM	2/day	50 km :: R	N/A :: Atmos
					Wielicki	2061	AM	6/day [d,n]	25-100 km :: G	N/A :: Atmos
					Sellers	2059	AM	4/day	100 km ::	0.5 km :: Trop
MODIS	AM/PM	Cloud Cover	King	2082				1/day, 1/mo	1 dg :: G	N/A :: Cloud
					Barron	2049	BM	1/day	100 km :: G	N/A :: Cloud
					Bates	2074	BM	1/day, 1/mo	1 dg :: G	N/A :: Cloud
					Dickinson	3345	BM		Low_res :: G	
					Robrock	2076	BM	1/day	100 km :: Polar	N/A :: Cloud
					Hansen	2052	BM	1/wk	500 km :: G	:: Cloud
					Liu	2055	AM		:: Ocean	N/A :: Cloud
					Bates	2069	AM \$	1/day	100 km :: G	0.5 km :: Trop

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument			Instrument Output Data Product		IDS Input Requirements		Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type				
MODIS	AM,PM Cloud Cover	King	2082	Lau	2070	AM \$	5% :: 5%	1/day	100 km :: G	N/A :: Cloud
MODIS	AM,PM Cloud Optical Depth	King	2311	Bates	2073	AM	20% :: 10%	1/day [d]	5 km :: G	N/A :: Cloud
				Harris	3445	BM	10-20% :: 5-10%	2/day-1/day	5-50 km :: Ocean/R	Column :: Atmos
				Jaacks	2326	BM	5-15% :: 1-10%	1/wk	10-50 km :: Land/R	Column :: Atmos
				Kerr, Sorooshian	2325	BM	10% :: 10%	1/5-16 day	10 km :: Land/R	Column :: Atmos
				Bates	2304	BM		1/day	15 x 45 km :: G	N/A :: Cloud
				Barron	2302	BM	3% :: 3%	1/day	10 km :: Ocean/R	N/A :: Cloud
				Herrmann	2306	BM	25% :: 0.25	1/day	10 km :: Ocean	N/A :: Cloud
				Dickinson	3382	AM			<0.5-1 deg :: G	N/A :: Cloud
MODIS	AM,PM Cloud Optical Depth	King	2312	Bates	2305	BM	20% :: 10%	1/day, 1/mo	1 deg :: G	N/A :: Cloud
				Dickinson	3382	BM	20% :: 10%	1/day, 1/mo	<0.5-1 deg :: G	N/A :: Cloud
				Dickinson	3383	BM			<0.5-1 deg :: G	N/A :: Cloud
				Rothrock	2544	BM	0.1 :: 0.1	1/day	100 km :: Polar	N/A :: Cloud
				Barron	2301	AM	3% :: 3%	1/day	100 km :: Ocean	N/A :: Cloud
				Bates	2304	AM		1/day	15 x 45 km :: G	N/A :: Cloud
MODIS	AM,PM Cloud Drop Phase	King, Menzel	1764	Wielicki	1760	BM	90% Conf :: 90% Conf	1/day	5 km :: G	N/A :: Cloud
				Herrmann	1785	AM	25% :: 10%	1/(16 day)	03-10 km :: R	N/A :: Atmos
				Wielicki	1761	AM	0.02 :: 0.02	1/day	10 km :: Ocean	N/A :: Cloud
							90% Conf :: 90% Conf	6/day [d,n]	25-100 km :: G	N/A :: Atmos
MODIS	AM,PM Cloud Drop Phase	King, Menzel	1765	Wielicki	1761	AM	90% Conf :: 90% Conf	1/day, 1/mo	1 deg :: G	N/A :: Cloud
				Bates	1759	BM		1/day, 1/mo	1 deg :: G	N/A :: Cloud
				Dickinson	3346	BM			<0.5-1 deg :: G	N/A :: Cloud
MODIS	AM,PM Cloud Drop Size (Effective Radius)	King, Menzel	1780	Wielicki	1771	BM	0-40% :: 5%	1/day	5 km :: G	N/A :: Cloud
				Dickinson	3347	AM	25% :: 10%	1/(16 day)	03-10 km :: R	N/A :: Atmos
				Wielicki	1772	AM	30% :: 10%	6/day [d,n]	25-100 km :: G	N/A :: Atmos
MODIS	AM,PM Cloud Drop Size (Effective Radius)	King, Menzel	1781	Bates	1777	BM	0-40% :: 5%	1/day, 1/mo	1 deg :: G	N/A :: Cloud
				Dickinson	3347	AM	0-40% :: 5%	1/day, 1/mo	<0.5-1 deg :: G	N/A :: Cloud
MODIS	AM,PM O3 Total Burden	Menzel	1333	Murakami	1331	BM	15-20DU :: 10DU	2/day, 1/day	5 km :: G	Column :: Atmos
				Kerr, Sorooshian	1308	BM	5-10% :: 2-10%	1/day	25 km :: G	Column :: Atmos
MODIS	AM,PM O3 Total Burden	Menzel	1334	Murakami	1331	AM	15-20DU :: 10DU	1/day, 1/mo	0.5 deg :: G	Column :: Atmos
				Moore	1309	AM	5-10% :: 2-10%	1/day	100 km :: G	Column :: Atmos
				Kerr, Sorooshian	1308	AM	25% :: 10%	1/day	25 km :: G	Column :: Atmos
MODIS	AM,PM Cloud Pressure, Top	Menzel	1528	Bates	1527	BM	50 mb :: 20 mb	2/day	5 km :: G	N/A :: Cloud
				Dickinson	3330	BM	50 mb :: 20 mb	2/day	5 km :: G	N/A :: Cloud
				Kerr, Sorooshian	1417	BM	0.5 km	1/hr	1 km :: Land/R	Column :: Atmos
				Harris	3437	BM	0.5 :: 0.3	2/day	20-50 km :: Ocean/R	Column :: Atmos
				Murakami	1418	AM	1 km ::		<0.5-1 deg :: G	Column :: Atmos
				Barron	1413	AM	100 m :: 25 m	1/day	10 km :: R	Column :: Atmos
MODIS	AM,PM Cloud Pressure, Top	Menzel	1529	Hansen	1399	BM	50 mb :: 20 mb	1/day, 1/mo	1 deg :: G	100 m :: Cloud
				Dickinson	3330	AM	50 m ::	1/wk	500 km :: G	N/A :: Cloud
									<0.5-1 deg :: G	Column :: Atmos

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument			Instrument Output Data Product		IDS Input Requirements		Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type				
MODIS	AM.PM Cloud Pressure, Top	Menzel	1529	Barron	1412	AM	100 m :: 25 m	1/day	100 km :: G	100 m :: Cloud
				Murkani	1418	AM	1 km ::	1/day	100 km :: Polar	:: Cloud
				Robrock	1419	AM	0.2 km :: 0.2 km	1/day	5 km :: G	N/A :: Atmos
MODIS	AM.PM Precipitable Water	Menzel	1875	Abbott	1858	BM	10% :: 5%	1/1-2 day	25 km :: Ocean [Southern]	Column :: Trop
				Barron	1860	BM	3% :: 1%	1/day	10 km :: R	Column :: Trop
				Murkani	1867	BM	20% ::	2/day	20-50 km :: Ocean/R	
				Harris	3440	BM	5% :: 3%	2/day	10 km :: Ocean [South Atlan]	N/A :: Atmos
				Srokosz	1868	BM	1 kg/m ² :: 0.1 kg/m ²	2/day (d.n)	50 km :: G	N/A :: Trop
				Bates	1862	BM	5% :: 3%	2/day	50 km :: Land	Column :: Atmos
				Kerr, Sorooshian	1865	BM	10% :: 10%	1/day	10-25 km :: Ocean/R	
				Harris	3439	BM	0.5 :: 0.5	1/day	25 km :: Ocean	Column :: Trop
				Liu	1866	AM	0.10 :: 0.05	2/day	5 km :: G	N/A :: Cloud
				Dickinson	3372	BM	10% :: 10%	1/wk	<0.5-1 deg :: G	:: Cloud
MODIS	AM.PM Cloud Emissivity	Menzel	2126	Moore	2360	BM	0.10 :: 0.05	1/day, 1/mo	1 deg :: G	N/A :: Cloud
				Dickinson	3372	BM			<0.5-1 deg :: G	
MODIS	AM.PM Cloud Temperature, Top	Menzel	2466	Barron	2438	BM	2 C :: 1 C	1/day, 1/mo	1 deg :: G	N/A :: Cloud
				Dickinson	3387	BM	2 :: 1	1/day	100 km :: G	N/A :: Cloud
				Sellers	2457	BM			<0.5-1 deg :: G	
				Hansen	2461	BM	5% ::	1/wk	500 km :: G	:: Cloud
				Harris	3449	BM	2 C :: 1 C	2/day	5 km :: G	N/A :: Cloud
MODIS	AM.PM Cloud Temperature, Top	Menzel	2467	Sellers	2457	BM	1-2 K :: 0.5-1 K	2/day-1/day	5-50 km :: Ocean/R	
				Barron	2459	BM	2 :: 1	1/day	10 km :: R	N/A :: Cloud
				Kerr, Sorooshian	2462	BM	5% :: 5%	1/hr	500 m :: Land/R	:: Cloud
				Bates	2460	AM	1 K :: 0.5 K	2/day (d.n)	15 x 45 km :: G	N/A :: Cloud
				Dickinson	3387	AM	10% :: 5%	1/(3-8 day)	<0.5-1 deg :: G	
MODIS	AM.PM Albedo, Spectral, TOA	Muller, Strahler	2001	Barron	2023	AM	3 ::	1/day	1 km :: Land/R	N/A :: TOA
				Bates	1995	AM		1/day	100 km :: G	N/A :: TOA
MODIS	AM.PM Land_3f Reflectance, Directional	Muller, Strahler	2434	Kerr, Sorooshian	2009	AM	10% :: 10%	1/day	50 km :: Land	N/A :: Sfc
				Chilur	3500	BM	5% :: 3%	1/day	25 km :: Land/R	:: TOA
MODIS	AM.PM Albedo, Spectral, Land_3f	Muller, Strahler, :	3665*	Sellers	2034	AM	0.05 :: 0.001	1 day	1 km :: R	N/A :: Sfc
				Dickinson	3367	BM	5% :: 3%	1/day	250-1000 m :: Canada/R	N/A :: Sfc
				Simard	2019	AM			1 km :: Land/R	N/A :: Sfc
				Hansen	2024	AM	2% ::	1/wk	High_res :: Land	N/A :: Sfc
				Barron	2013	AM	0.02 ::	1/wk	500 km :: Land	N/A :: Sfc
MODIS	AM.PM Albedo, Total [SW], Land_3f	Muller, Strahler, :	3666*	Isachs	1998	AM	1% :: 1%	1/wk	10 km :: G	N/A :: Sfc
				Kerr, Sorooshian	2014	AM	:: 3%	1/wk	250 m :: Land/R	N/A :: Sfc
				Simard	2019	AM	10% :: 10%	1/wk	500 m :: Land	N/A :: Sfc
				Hansen	2024	AM	5% :: 3%	1/day	1 km :: Land/R	N/A :: Sfc
				Barron	2013	AM	2% ::	1/wk	Canada/R	N/A :: Sfc

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product											
Instrument	Platform	Product Name	TM	Prod #	Investigator	IDS Input Requirements		Accuracy	Temporal	Horizontal	Vertical
MODIS	AM/PM	Albedo, Total (SW), Land_gfc	Muller, Strahler, : 3666*		Iacota	1998	AM	3% ::	1/wk	250 m :: Land/R	N/A :: Sfc
MODIS	AM/PM	Albedo, Total (SW), TOA	Muller, Strahler, : 3667*		Kerr, Sorooshian	2014	AM	10% :: 10%	1/wk	500 m :: Land	N/A :: Sfc
MODIS	AM/PM	Land_gfc Reflectance, Bidirectional (BRDF)	Muller, Strahler, : 3669*		Barron	2023	BM	5% :: 3%	1/day	1 km :: Land/R	N/A :: TOA
MODIS	AM/PM	Land_gfc Reflectance, Bidirectional (BRDF)	Muller, Strahler, : 3669*		Dickinson	3363	BM	3 ::	1/day	<0.5-1 deg :: G	N/A :: TOA
MODIS	AM/PM	Land_gfc Reflectance, Bidirectional (BRDF)	Muller, Strahler, : 3669*		Wielicki	2043	BM	5% :: 3%	1/day	1 km :: Land/R	N/A :: Sfc
MODIS	AM/PM	Land_gfc Reflectance, Bidirectional (BRDF)	Muller, Strahler, : 3669*		Sellers	2034	AM	5% :: 2%	1/day [d]	0.2-2km :: R	N/A :: Sfc, Atmos
MODIS	AM/PM	Land_gfc Reflectance, Bidirectional (BRDF)	Muller, Strahler, : 3669*		Kerr, Sorooshian	2042	AM	10% :: 10%	1/week	N/A :: Land	N/A :: Sfc
MODIS	AM/PM	Land_gfc Reflectance, Bidirectional (BRDF)	Muller, Strahler, : 3669*		Kerr, Sorooshian	2046	AM	10% :: 10%	1/week	N/A :: Land	N/A :: Sfc
MODIS	AM/PM	Land_gfc Reflectance, Bidirectional (BRDF)	Muller, Strahler, : 3669*		Dickinson	3370	AM			<0.5-1 deg :: Land	
MODIS	AM/PM	Land_gfc Reflectance, Bidirectional (BRDF)	Muller, Strahler, : 3669*		Dickinson	3371	AM			<0.5-1 deg :: Land	
MODIS	AM/PM	Land_gfc Reflectance, Bidirectional (BRDF)	Muller, Strahler, : 3669*		Dickinson	3369	AM			<0.5-1 deg :: G	
MODIS	AM/PM	Land_gfc Reflectance, Bidirectional (BRDF)	Muller, Strahler, : 3669*		Sellers	2041	AM			250-500 m :: Land	
MODIS	AM/PM	Land_gfc Reflectance, Bidirectional (BRDF)	Muller, Strahler, : 3669*		Kerr, Sorooshian	1549	BM	5% :: 3%	1/day	1 km :: Land/R	N/A :: Sfc
MODIS	AM/PM	Land_gfc Reflectance, Bidirectional (BRDF)	Muller, Strahler, : 3669*		Lau	1551	BM	0.1 m :: 0.2 m	1/week	25 km :: Land	N/A :: Sfc
MODIS	AM/PM	Land_gfc Reflectance, Bidirectional (BRDF)	Muller, Strahler, : 3669*		Barron	1545	BM	10% :: 10%	1/wk	10 km :: Land/R	N/A :: Sfc
MODIS	AM/PM	Land_gfc Reflectance, Bidirectional (BRDF)	Muller, Strahler, : 3669*		Barron	1547	BM	10% :: 0.1	1/mision, 1/yr	10 km :: Land/R	N/A :: Sfc
MODIS	AM/PM	Land_gfc Reflectance, Bidirectional (BRDF)	Muller, Strahler, : 3669*		Kerr, Sorooshian	1552	BM	10% :: 0.1	1/mision, 1/yr	100 km :: Land	N/A :: Sfc
MODIS	AM/PM	Land_gfc Reflectance, Bidirectional (BRDF)	Muller, Strahler, : 3669*		Dickinson	3404	AM	0.1 cm :: 0.2 cm	2/mo	25 km :: Land	N/A :: Sfc
MODIS	AM/PM	Organic Matter Conc, Dissolved	Parlow et al	2582	Harris	3457	BM	150% :: 30%	1/day, 1/wk, 1/mo	20 km :: Ocean [Southern]	N/A :: TOO
MODIS	AM/PM	Organic Matter Conc, Dissolved	Parlow et al	2583	Brewer	2561	AM	100% :: 30%	1/day	1-20 km :: Ocean/R	
MODIS	AM/PM	Organic Matter Conc, Dissolved	Parlow et al	2583	Abbott	2579	BM	100% :: 10%	1/day, 1/wk, 1/mo	1 km :: Ocean [Southern]/L	N/A :: TOO
MODIS	AM/PM	Organic Matter Conc, Dissolved	Parlow et al	2583	Harris	3457	BM	50% :: 20%	1/(1-2 day)	1-4 km :: Ocean [Southern]	N/A :: TOO
MODIS	AM/PM	Vegetation Index, Leaf Area, (LAI)	Running	2680*	Cihlar	3499	BM	100% :: 30%	1/day	1-20 km :: Ocean/R	N/A :: TOO
MODIS	AM/PM	Vegetation Index, Leaf Area, (LAI)	Running	2680*	Dickinson	3406	BM	0.1-0.25 :: 5-20%	1/day, 1/wk	pixel size :: Land/G.R.L.	N/A :: N/A
MODIS	AM/PM	Vegetation Index, Leaf Area, (LAI)	Running	2680*	Schmidt	2679	BM	10% :: 1%	1 wk	1 km :: Canada/R	N/A :: Sfc
MODIS	AM/PM	Vegetation Index, Leaf Area, (LAI)	Running	2680*	Barron	2673	BM	10% :: 1%	[multiple]	Low_res :: Land	N/A :: Sfc
MODIS	AM/PM	Vegetation Index, Leaf Area, (LAI)	Running	2680*	Barron	2674	BM	10% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
MODIS	AM/PM	Vegetation Index, Leaf Area, (LAI)	Running	2680*	Barron	2675	BM	0.5 :: 0.2	1/day	100 km :: Land	N/A :: Sfc
MODIS	AM/PM	Vegetation Index, Leaf Area, (LAI)	Running	2680*	Barron	2676	BM	0.5 :: 0.2	1/day	10 km :: Land/R	N/A :: Sfc
MODIS	AM/PM	Vegetation Index, Leaf Area, (LAI)	Running	2680*	Bates	2676	BM	0.5 :: 0.2	1/day	30 m :: Land/L	N/A :: Sfc
MODIS	AM/PM	Vegetation Index, Leaf Area, (LAI)	Running	2680*	Schmidt	2678	BM	10% :: 1%	1/mo	60 m :: Land	N/A :: Sfc
MODIS	AM/PM	Vegetation Index, Leaf Area, (LAI)	Running	2680*	Lau	2677	BM	10% :: 1%	1/wk, 1/mo	30 m :: 6 sites/L	N/A :: Sfc
MODIS	AM/PM	Vegetation Productivity, Primary	Running	2703*	Schmidt	2677	BM	10% :: 10%	1/week, 1/mo, 1/yr	1 km :: Land/R	N/A :: Sfc
MODIS	AM/PM	Vegetation Productivity, Primary	Running	2703*	Schmidt	2698	BM	100 :: 5-30%	1/yr	1 km :: Land/G.R	N/A :: Sfc
MODIS	AM/PM	Level-1B Radiance, MODIS<3um	Salomonson	2338	Schmidt	2698	BM	5%/(1/yr) :: RMS<NEAL	1/day	500 m :: 6 sites/L	N/A :: N/A
MODIS	AM/PM	Level-1B Radiance, MODIS<3um	Salomonson	2338	Sellers	2389	BM	20% :: 5%	1/day	0.5 km :: G	N/A :: N/A
MODIS	AM/PM	Level-1B Radiance, MODIS<3um	Salomonson	2338	Srokosz	3310	BM	0.05% ::	1/day	1 km :: R	N/A :: Atmos
MODIS	AM/PM	Level-1B Radiance, MODIS<3um	Salomonson	2338	Wielicki	2390	BM	W5% L.W.1K :: SW2% L.W.1	2/day [d,n]	0.25-1 km :: R	N/A :: Atmos
MODIS	AM/PM	Level-1B Radiance, MODIS<3um	Salomonson	2339	Schoeberl	2413	BM	5% :: 2%	1/day	:: G	:: Strat
MODIS	AM/PM	Level-1B Radiance, MODIS<3um	Salomonson	2339	Sellers	2389	BM	5%/(1/yr) :: RMS<NEAL	1/day	1 km :: G	N/A :: N/A
MODIS	AM/PM	Level-1B Radiance, MODIS<3um	Salomonson	2339	Srokosz	3310	BM	0.05% ::	1/day	1 km :: R	N/A :: Atmos
MODIS	AM/PM	Level-1B Radiance, MODIS<3um	Salomonson	2339	Wielicki	2390	BM	W5% L.W.1K :: SW2% L.W.1	2/day [d,n]	0.25-1 km :: R	N/A :: Atmos

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument			Product			Instrument Output Data			IDIS Input Requirements			Accuracy			Temporal Resolution			Horizontal Resol :: Cover.			Vertical Resol :: Cover.		
Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	Vertical												
MODIS	AM,PM	Level-1B Radiance, MODIS<3um	Salomonson	2339	Schoeberl	2413	BM	5% :: 2% 1%(1x) :: RMS<NE&L	1/day	1 km :: G	N/A :: N/A												
MODIS	AM,PM	Level-1B Radiance, MODIS>3um	Salomonson	2340	Sellers	2389	BM		1/day	1 km :: G	N/A :: N/A												
					Srokosz	3310	BM	0.05% ::	1/day	1 km :: R	N/A :: Atmos												
					Wielicki	2390	BM	W5%,1.W,1K :: SW2%,1.W,1	2/day (d,n)	0.25-1 km :: R	N/A :: Atmos												
					Schoeberl	2374	AM	1%-(1K) :: 0.5% 5%(1x) :: RMS<NE&L	1/day	100 km :: G	1.5 km :: Strat												
MODIS	AM,PM	Level-1B Radiance, MODIS<3um	Salomonson	2392	Sellers	2389	BM		1/day	0.25 km :: G	N/A :: N/A												
					Srokosz	3310	BM	0.05% ::	1/day	1 km :: R	N/A :: Atmos												
					Wielicki	2390	BM	W5%,1.W,1K :: SW2%,1.W,1	2/day (d,n)	0.25-1 km :: R	N/A :: Atmos												
					Schoeberl	2413	BM	5% :: 2% <=5% :: <=5%	1/day	1 km :: G	1.5 km :: Strat												
MODIS	AM,PM	Snow Cover	Salomonson	3020	Barnon	3005	BM	<=5% :: <=5%	1/day, 1/wk	10 km :: Land	N/A :: Sfc												
					Bates	3007	BM	5% :: 5%	1/day	10 km :: Land/R	N/A :: Sfc												
					Dickinson	3415	BM	<=5% :: <=5%	1/day, 1/wk	10 km :: Land	N/A :: Sfc												
					Murkani	3014	BM	10% ::		Low_res :: Land	N/A :: Sfc												
					Simard	3026	BM	10km ::	1/(7 day)	10 km :: Canada/R	N/A :: Sfc												
					Wielicki	3016	BM	10% :: 5%	1/day	50 km :: Land	N/A :: Sfc												
					Barnon	3003	BM	5% :: 5%	1/day	100 km :: Land	N/A :: Sfc												
					Hansen	3009	BM	0.02 ::	1/wk	500 km :: Land	5% :: Sfc												
					Sellers	3015	BM		1/(1-4 day)	100 km ::	5% :: Sfc												
					Lau	3013	AM	50 :: 10	1/wk	1 km :: Land/L	N/A :: Sfc												
					Bates	3006	AM		2/day (d,n)	50 km :: Land	N/A :: Sfc												
MODIS	AM,PM	Snow Cover	Salomonson	3021	Dickinson	3416	BM	<=5% :: <=5%	1/day, 1/wk	1 km :: Land/R	N/A :: Sfc												
					Isacks	3010	BM	5% :: 2%	1/mo	1 km :: Land/R	N/A :: Sfc												
					Lau	3013	BM	50 :: 10	1/wk	1 km :: Land/L	N/A :: Sfc												
					Murkani	3014	BM	10% ::		1 km :: Land	N/A :: Sfc												
					Hansen	3009	AM	0.02 ::	1/wk	500 km :: Land	5% :: Sfc												
					Sellers	3015	AM		1/(1-4 day)	100 km ::	5% :: Sfc												
MODIS	AM,PM	Sea_Ice Max Extent	Salomonson	3153	Barnon	3168	BM	<=5% :: <=5%	1/day, 1/wk, 1/mo	10 km :: Ocean/Cryo	N/A :: Sfc												
					Barnon	3161	BM	5% :: 5%	1/day	10 km :: Ocean/Cryo	N/A :: Sfc												
					Simard	3190	BM	10km/10% ::	1/day	10 km :: Ocean/Cryo	N/A :: Sfc												
					Srokosz	3158	BM	0.1 dg :: 0.01 dg	1/(7 day)	10 km :: Canada/R	N/A :: Sfc												
					Abbott	3156	BM		1/day	N/A :: Ocean/Cryo	N/A :: Sfc												
					Simard	3162	BM	25km ::	1/(7 day)	25 km :: Canada/R	N/A :: Sfc												
					Barnon	3160	BM	5% :: 5%	1/day	100 km :: Ocean/Cryo	N/A :: Sfc												
					Rothrock	3189	BM	0.05 :: 0.05	1/(3 day)	25 km :: Ocean/Cryo	N/A :: Sfc												
					Simard	3157	BM	25km ::	1/(7 day)	25 km :: Canada/R	N/A :: Sfc												
					Bates	3148	AM	10% :: 10%	2/day (d,n)	50 km :: Canada/R	N/A :: Sfc												
MODIS	AM,PM	Sea_Ice Max Extent	Salomonson	3154	Srokosz	3158	AM	<=5% :: <=5%	1/day, 1/wk, 1/mo	1 km :: Ocean/Cryo,R	N/A :: Sfc												
					Abbott	3156	AM	0.1 dg :: 0.01 dg	1/day	N/A :: Ocean/Cryo	N/A :: Sfc												
					Barnon	3161	AM	5% :: 5%	1/day	25 km :: Ocean/Cryo	N/A :: Sfc												
					Simard	3157	AM	25km ::	1/day	10 km :: Ocean/Cryo	N/A :: Sfc												
MODIS	AM,PM	Cloud Cover	Salomonson?	3641	Dickinson	3343	BM	10% :: 5%	1/(7 day)	25 km :: Canada/R	N/A :: Sfc												

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument	Platform	Instrument Output Data Product			IDS Input Requirements			Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
		Product Name	TM	Prod #	Investigator	Prod #	Match Type				
MODIS	AM/PM	Land_Cover_Type	Strahler, Huete et	2669							
					Isacks	2732	BM	10% :: 5%	1/season	1 km :: Land	N/A :: Sfc
					Moore	2721	BM	15% :: 15%	1/yr	1 km :: Land/R	N/A :: Sfc
					Moore	2736	BM	15% :: 15%	1/yr	1 km :: Land	:: Sfc
					Dickinson	3401	BM			Mod-low_res :: Land	:: Sfc
					Isacks	2719	BM		1/season	1 km :: Land/R	N/A :: Sfc
					Kerr, Sorooshian	2630	BM	5% :: 5%	1/season	Low_res :: Land	N/A :: Sfc
					Dickinson	3408	BM				
					Moore	2800	AM	15% :: 15%	1/yr	1 km :: Land	:: Sfc
					Barron	2716	AM	57 :: 57	1/yr	10 km :: Land/R	N/A :: Sfc
					Hansen	2764	AM	5% ::	1/wk	500 km :: Land	:: Sfc
					Lau	3061	AM	100 ::	1/wk	1 km :: Land/R	N/A :: Sfc
					Barron	2728	AM	57 :: 57	1/yr	10 km :: Land/R	N/A :: Sfc
					Dickinson	3405	AM			<0.5-1 deg :: Land	N/A :: Sfc
								10% :: 5%	1/season	5 km :: Land	
					Dickinson	3405	BM			<0.5-1 deg :: Land	N/A :: Sfc
					Kerr, Sorooshian	2630	BM	5% :: 5%	1/season	:: Land/R	N/A :: Sfc
MODIS	AM/PM	Land_Cover_Type	Strahler, Huete et	2670	Sinnard	2788	BM	10% ::		:: Canada/R	N/A :: Sfc
					Sinnard	2720	BM	10% ::		:: Canada/R	N/A :: Sfc
					Barron	2716	BM	57 :: 57	1/yr	10 km :: Land/R	N/A :: Sfc
					Barron	2717	BM	57 :: 57	1/yr	100 km :: Land	N/A :: Sfc
					Hansen	2718	BM	5% ::	1/wk	500 km :: Land	:: Sfc
					Hansen	2764	BM	5% ::	1/wk	500 km :: Land	:: Sfc
					Barron	2798	BM	57 :: 57	1/yr	10 km :: Land/R	N/A :: Sfc
					Barron	2728	BM	57 :: 57	1/yr	10 km :: Land/R	N/A :: Sfc
					Barron	2797	BM	57 :: 57	1/yr	100 km :: Land	N/A :: Sfc
					Barron	2790	BM	57 :: 57	1/yr	100 km :: Land	N/A :: Sfc
					Barron	2786	BM	5 :: 5	1/season	100 km :: Land	N/A :: Sfc
					Hansen	2731	BM	5% ::	1/wk	500 km :: Land	:: Sfc
					Sellers	2740	BM		1/(1-4 day)	100 km ::	:: Sfc
					Barron	2785	BM	5 :: 5	1/season	10 km :: Land/R	N/A :: Sfc
					Dickinson	3401	AM			Mod-low_res :: Land	N/A :: Sfc
								10% :: 7%	1/season	5 km :: Land	N/A :: Sfc
MODIS	AM/PM	PAR_Incident, (IPAR)	Tonne	2268*	Hansen	2658	AM \$	10% ::	1/wk	500 km :: Land	N/A :: Sfc
					Abbott	2269	BM	200 :: 5 - 20%	1/day, 1/wk	1 km :: G.R	N/A :: Atmos
					Schmidt	2263	BM	5% :: 1%	1/(1-2 day)	1-4 km :: Ocean [Southern]	N/A :: Sfc
					Cibler	3498	BM	10% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
					Cibler	3490	BM	10% :: 1%	1 day	250-1000 m :: Canada/R	N/A :: Sfc
					Moore	2329	BM	20% :: 10%	1 wk	1 km^2 ::	N/A :: Sfc
					Schmidt	2263	BM	10% :: 1%	1/day, 1/wk	500 m :: Land/R	N/A :: Sfc
					Harris	3443	AM	5% :: 2%	2/day	500 m :: 6 sites/L	N/A :: Sfc
								10-30% :: 10%	1/day, 1/mo	20-50 km :: Ocean/R	N/A :: Atmos
					Harris	3423	BM	0.1 :: 0.05	1/day	50 km :: Ocean/R	N/A :: Atmos
MODIS	AM/PM	Aerosol Size-distribution (Radius-Dispersion, Tauw, Kaufman	1022		Schoeberl	1021	BM	10% :: 5%	1/day	200 km :: G	1 km :: Strat
					Hartmann	1020	BM	20% :: 20%	1/day	20 km :: G	N/A :: 0-15 km
					Bates	1019	AM	:: 20%	1/(5-16 day)	15.4 km :: G	Column :: Atmos
					Isacks	1024	AM	:: 20%	1/wk	2-15 km ::	Column :: Atmos

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument		Instrument Output Data Product			IDS Input Requirements			Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type	Abs :: Rel	Resolution	Resol :: Cover.	Vertical Resol :: Cover.	
MODIS	AM,PM	Aerosol Optical Depth, Spectral	2294	Tawe, Kaufman			0.05 :: 0.02	1/day, 1/mo	0.5 dg :: Ocean	N/A :: Atmos	
					Sellers	2288	BM	::			
					Sellers	1004	BM				
					Harris	3444	BM	10%,0.05 :: 5%,0.02	2/day-1/day	20-50 km :: Ocean/R	
					Munkami	2327	AM	5-10% ::		:: G	N/A :: Atmos
					Hansen	1001	AM-	tau=0.02 ::	1/wk	500 km :: G	:: Trop
					Wielicki	2289	AM	0.10 :: 0.10	1/day	1.25 dg :: G	N/A :: Atmos
					Hansen	2287	AM	tau=0.02 ::	1/wk	500 km :: G	:: Strat
					Hartmann	1002	AM	tau=0.02 ::	1/day	20 km :: G	3 km :: 0-15 km
					Pyle	1003	AM		2/day	:: G	:: Strat
MODIS	AM,PM	Land_gfc Roughness	1556*	Tawe, Muller			15% :: 5 - 8%	1/day, 1/wk	1 km :: G,R	N/A :: Sfc	
					Dickinson	3331	BM			High_res :: Land	
					Kerr, Sorooshian	1552	BM	0.1 cm :: 0.2 cm	2/mo	25 km :: Land	N/A :: Sfc
					Lau	1551	BM	10% :: 10%	1/wk	10 km :: Land/R	N/A :: Sfc
					Mouginis-Mark	3287	BM	3-24 cm ::	1/yr	30 m :: Land/L	N/A :: Sfc
					Dickinson	3404	AM			Med-low_res :: Land	
								15% :: 5 - 8%	1/day, 1/wk	10 km :: G,R	N/A :: Sfc
					Barros	1545	BM	10% :: 0.1	1/mision, 1/yr	10 km :: Land/R	N/A :: Sfc
					Dickinson	3332	BM			Low_res :: Land	
					Dickinson	3404	BM			Med-low_res :: Land	
MODIS	AM,PM	Land_gfc Roughness	1557*	Tawe, Muller			10% :: 10%	1/wk	10 km :: Land/R	N/A :: Sfc	
					Lau	1551	BM			10 km :: Land/R	N/A :: Sfc
					Kerr, Sorooshian	1549	BM	0.1 m :: 0.2 m	1/week	25 km :: Land	N/A :: Sfc
					Barros	1547	BM	10% :: 0.1	1/mision, 1/yr	100 km :: Land	N/A :: Sfc
					Kerr, Sorooshian	1552	BM	0.1 cm :: 0.2 cm	2/mo	25 km :: Land	N/A :: Sfc
								15% :: 5 - 8%	1/day, 1/wk	1 km :: G,R	N/A :: Sfc
					Dickinson	3367	BM			High_res :: Land	
					Dickinson	3363	AM			<0.5-1 deg :: G	
					Simard	2019	AM	2% ::		:: Canada/R	N/A :: Sfc
					Hartmann	1997	AM	1% :: 0.5%	1/day	20 km :: G	N/A ::
MODIS	AM,PM	Albedo, Land_gfc	2015*	Tawe, Muller			1% :: 3%	1/wk	250 m :: Land/R	N/A :: Sfc	
					Isacks	1998	AM			500 m :: Land	N/A :: Sfc
					Kerr, Sorooshian	2014	AM	10% :: 10%	1/wk	500 m :: Land	N/A :: Sfc
								15% :: 5 - 8%	1/day, 1/wk	10 km :: G,R	N/A :: Sfc
					Barros	2013	BM	1% :: 1%	1/wk	10 km :: G	N/A :: Sfc
					Hartmann	1997	BM	1% :: 0.5%	1/day	20 km :: G	N/A ::
					Dickinson	3363	BM			<0.5-1 deg :: G	
					Simard	2019	AM	2% ::		:: Canada/R	N/A :: Sfc
					Bates	1995	AM		1/day	50 km :: Land	N/A :: Sfc
					MODIS	AM,PM	Land_gfc Reflectance, Bi-directional, (BRDF), Tawe, Muller	2424*	Chiller		
3500	BM	0.05 :: 0.001	1 day	250-1000 m :: Canada/R						N/A :: Sfc	
Kerr, Sorooshian	2042	AM	10% :: 10%	1/week						N/A :: Land	N/A :: Sfc
Kerr, Sorooshian	2046	AM	10% :: 10%	1/week						N/A :: Land	N/A :: Sfc
Sellers	2041	AM								250-500 m :: Land	
			15% :: 5 - 8%	1/day, 1/wk						10 km :: G,R	N/A :: Sfc
Brewer	2426	BM	3% :: 1%	1/day, 1/week						1.7 km :: Ocean	N/A :: Sfc
Dickinson	3370	BM								<0.5-1 deg :: Land	
Dickinson	3371	BM								<0.5-1 deg :: Land	
Dickinson	3369	BM								<0.5-1 deg :: G	
MODIS	AM,PM	Land_gfc Reflectance, Bi-directional, (BRDF), Tawe, Muller	2425*	Sellers							

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument	Platform	Instrument Output Data Product			IDS Input Requirements		Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
		Product Name	TM	Prod #	Investigator	Prod # Match Type				
MODIS	AM/PM	Land_gfc Reflectance, Bi-directional, (BRDF), Tower, Muller		2425*	Brewer	2427 AM	3% :: 1%	1/day, 1/week	22 km :: Ocean/L	N/A :: Sfc
	AM/PM	Land_gfc Temperature	Wan	2484	Kerr, Sorooshian	2046 AM	10% :: 10%	1/week	N/A :: Land	N/A :: Sfc
MODIS	AM/PM	Land_gfc Temperature	Wan	2484	Dickinson	3391 BM	1 C :: 1 C	1/day, 1/week	1 km :: Land/R	N/A :: Sfc
					Mouginis-Mark	3290 BM	10 C ::	[near-real time ?]	1 km :: O	N/A :: Sfc
					Richey, Batista	2476 BM		1/day	Land/R	N/A :: Sfc
					Cihlar	3503 BM	0.5 K :: 1.0 K	1 day	250-1000 m :: Canada/R	N/A :: Sfc
					Moore	2535 BM				:: Sfc
					Kerr, Sorooshian	2456 BM	0.5 K :: 0.5 K	2/day (d,n)	500 m :: Land/R	:: Sfc
					Law	2502 BM	1 K :: 1 K	1/3 day	1 km :: Land/R	N/A :: Sfc
					Harris	3450 BM	0.5 :: 0.2	2/day	20-50 km :: Ocean/R	
					Sellers	2478 BM	::		500 m ::	
					Isaacs	2496 BM	1.3 :: 1	1/week	1 km :: Land/R	N/A :: Sfc
					Simard	3312 BM	1.3 :: 1.0 ?	2/day	1 km :: R/Canada	N/A :: Sfc
					Dovier	2500 AM	1 K :: 0.3 K	1/week	500 m :: Snow/L	
					Kerr, Sorooshian	1631 AM	1 K :: 1 K	2/day (d,n)	500 m :: Land/R	N/A :: Sfc
					Schindl	1632 AM	10% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
					Barron	2474 AM	1 :: 0.5	1/day	100 km :: G	N/A :: Sfc
					Barron	2472 AM	1 :: 0.5	1/day	30 m :: Land/L	N/A :: Sfc
							1.3 C :: 1 C	1/day, 1/week	10 km :: Land	N/A :: Sfc
					Barron	2473 BM	1 :: 0.5	1/day	10 km :: Land/R	N/A :: Sfc
					Dickinson	3391 BM			Med. res :: Land	
					Richey, Batista	2476 BM		1/day	Land/R	N/A :: Sfc
MODIS	AM/PM	Land_gfc Temperature	Wan	2485	Harris	3450 BM	0.5 :: 0.2	2/day	20-50 km :: Ocean/R	
					Barron	3051 BM	1 K ::	1/week	10 km :: Land/Cryo	N/A :: Sfc
					Dickinson	3388 BM			<0.5-1 deg :: Land/Cryo	
					Dickinson	3394 BM			<0.5-1 deg :: Land	
					Barron	2474 BM	1 :: 0.5	1/day	100 km :: G	N/A :: Sfc
					Barron	3052 BM	1 K ::	1/week	100 km :: Land/Cryo	N/A :: Sfc
					Simard	3313 BM	1.3 :: 1.0 ?	2/day	10 km :: R/Canada	N/A :: Sfc
					Hansen	2477 AM	0.2 C ::	1/week	500 km :: Land	:: Sfc
					Wielicki	2479 AM	1 K :: 0.5 K	4/day (d,n)	1.25 dg :: Land	N/A :: Sfc
							0.05 :: 0.02	1 day, 1 wk	1 km :: Land/R	N/A :: Sfc
					Cihlar	3487 AM	0.025 :: 0.025	10 day	1.25 deg :: Canada/R	N/A :: Sfc
					Isaacs	2125 AM		1/yr	15-90 m :: Land/L	N/A :: Sfc
MODIS	AM/PM	Land_gfc Emissivity	Wan	3323*			0.05 :: 0.02	1 day, 1 wk	10 km :: Land	N/A :: Sfc
					Bates	2121 BM		1/day	10 km :: Polar	N/A :: Sfc
					Dickinson	3373 BM			<0.5-1 deg :: Land	
					Cihlar	3487 BM	0.025 :: 0.025	10 day	1.25 deg :: Canada/R	N/A :: Sfc
					Bates	2112 BM	0.05 :: 0.025	2/day (d,n)	50 km :: Land	N/A :: Sfc
MOPITT	AM/PM	CH4 Total Burden	Drummond	1096			:: 1%	1/(12 s) [?]	120 km :: G	Column :: Atmos
					Hansen	1075 AM	0.10% ::	1/week	500 km :: Wetlands	:: Trop
					Hansen	1076 AM		1/week	500 km :: G	:: Trop
MOPITT	AM/PM	CO Conc	Drummond	1126			:: 10%	1/(0.4 s) [?]	22 km :: G	3-4 km :: 0-15 km
					Dickinson	3325 BM				
					Moore	1118 BM	25% :: 10%	1/day	100 km :: G	:: Trop
					Schoeberl	1120 BM	15% :: 5	1/day	2 x 3 dg :: G	2 km :: Trop

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument			Instrument Output Data Product			IDS Input Requirements			Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
MOPIIT	Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type					
MOPIIT	AMI	CO Conc	Drummond	1126	Hansen	1117	BM	0.10% ::	1/wk	500 km ::	500 km ::	2 km :: Strat
					Pyle	1119	AM	15% :: 5%	2/day	15 x 4 km :: G	15 x 4 km :: G	2 km :: Strat
					Grose	1116	AM	15% :: 5%	2/day	30 x 4 dg :: G	30 x 4 dg :: G	3 km :: Mid-atmos
MOPIIT	AMI	CO Total Burden	Drummond	1137				:: 10%	1/(4 s) [?]	66 km :: G [dg]	66 km :: G [dg]	Column :: Atmos
					Moore	1118	AM	25% :: 10%	1/day	100 km :: G	100 km :: G	:: Trop
SAFIRE	MO	CH4 Conc	Russell	1086	Hansen	1117	AM	0.10% ::	1/wk	500 km ::	500 km ::	:: Trop
					Murakami	1374	BM	:: 7% (15-55km) 20% ::	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	25 x 1.5 dg :: 86S-86N	1.5 km :: 10-65 km N/A :: TOA
					Grose	1074	AM	15% :: 5%	2/day	30 x 4 dg :: G	30 x 4 dg :: G	3 km :: Mid-atmos
					Pyle	1077	AM	10% :: 5%	2/day	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat
SAFIRE	MO	H2O2 Conc	Russell	1172	Schoeberl	1078	AM	15% :: 0.05 :: 7% (30-35 km)	1/day	2 x 3 dg :: G	2 x 3 dg :: G	1.5 km :: Strat
									1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N	25 x 2.5 dg :: 86S-86N	3 km :: 20-50 km
					Grose	1166	BM	25% :: 10%	2/day	30 x 10 dg :: G	30 x 10 dg :: G	3 km :: Strat
SAFIRE	MO	HBr Conc	Russell	1180	Pyle	1167	BM	20% :: 10%	2/day	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat
					Schoeberl	1168	AM	20% :: 11.05s :: 10% (25-35 km)	1/wk	8 x 10 dg :: G	8 x 10 dg :: G	2 km :: Strat
					Grose	1176	BM	25% :: 10%	1/day	30 x 4 dg :: G	30 x 4 dg :: G	3 km :: Strat
SAFIRE	MO	HCl Conc	Russell	1187	Schoeberl	1178	BM	20% :: 1	1/wk	8 x 10 dg :: G	8 x 10 dg :: G	3 km :: Strat
					Pyle	1177	BM	25% :: 10%	2/day	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat
								:: 5% (25-55 km)	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N	25 x 2.5 dg :: 86S-86N	3 km :: 10-65 km
SAFIRE	MO	HCN Conc	Russell	1192	Mouginat-Mark	3283	AM	15% :: 10%	1/day	30 x 4 dg :: G	30 x 4 dg :: G	N/A :: Plume_col
					Grose	1182	AM	15% :: 0.1	1/day	4 x 5 dg :: G	4 x 5 dg :: G	3 km :: Mid-atmos
					Schoeberl	1184	AM	15% :: 5%	2/day	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat
SAFIRE	MO	HF Conc	Russell	1197	Pyle	1183	AM	15% :: 5%	2/day	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat
								:: 35% (25-30 km)	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N	25 x 2.5 dg :: 86S-86N	3 km :: 25-35 km
					Schoeberl	1190	AM	20% :: 0.01 :: 15% (40-60 km)	1/wk	8 x 10 dg :: G	8 x 10 dg :: G	3 km :: Strat
SAFIRE	MO	HNO3 Conc	Russell	1204	Grose	1193	BM	25% :: 10%	1/day	30 x 4 dg :: G	30 x 4 dg :: G	3 km :: Strat
					Schoeberl	1195	BM	15% :: 0.05	1/day	4 x 5 dg :: G	4 x 5 dg :: G	2 km :: Strat
					Pyle	1194	BM	15% :: 5%	2/day	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat
SAFIRE	MO	H2O Conc	Russell	1217	Schoeberl	1200	AM	15% :: 0.1 :: 7% (15-40 km)	1/day	2 x 3 dg :: G	2 x 3 dg :: G	1.5 km :: 10-45 km
					Pyle	1199	AM	15% :: 5%	2/day	15 x 4 km :: G	15 x 4 km :: G	2 km :: Strat
					Grose	1198	AM	20% :: 5%	2/day	30 x 10 dg :: G	30 x 10 dg :: G	3 km :: Mid-atmos
SAFIRE	MO	HOCl Conc	Russell	1223	Grose	1212	BM	25% :: 10%	2/day	30 x 10 dg :: G	30 x 10 dg :: G	3 km :: 20-75 km
					Schoeberl	1214	AM	15% :: 0.02	1/day [d]	6 x 8 dg :: G	6 x 8 dg :: G	2 km :: Mid-atmos
					Pyle	1213	AM	25% :: 10%	2/day	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat
SAFIRE	MO	N2O Conc	Russell	1241	Grose	1218	BM	20% :: 10%	2/day	30 x 4 dg :: G	30 x 4 dg :: G	3 km :: Strat
					Schoeberl	1220	AM	20% :: 0.02	1/wk	8 x 10 dg :: G	8 x 10 dg :: G	3 km :: Strat
					Pyle	1219	AM	25% :: 10%	2/day	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat
SAFIRE	MO	N2O5 Conc	Russell	1255	Schoeberl	1232	AM	15% (20-35 km) :: 15% :: 10	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	25 x 1.5 dg :: 86S-86N	1.5 km :: 20-40 km
					Grose	1229	AM	15% :: 5%	1/day	2 x 3 dg :: G	2 x 3 dg :: G	2 km :: Strat
					Schoeberl	1230	AM	15% :: 10%	1/day	30 x 4 dg :: G	30 x 4 dg :: G	3 km :: Mid-atmos
SAFIRE	MO	N2O5 Conc	Russell	1255	Grose	1250	AM	20% :: 10%	2/day	30 x 4 dg :: G	30 x 4 dg :: G	1.5-3 km :: 10-45 km
					Schoeberl	1252	AM	15% :: 20%	1/day	8 x 10 dg :: G	8 x 10 dg :: G	3 km :: Mid-atmos
												3 km :: Strat

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product											
Instrument	Platform	Product Name	TM	Prod #	Investigator	IDS Input Requirements		Accuracy	Temporal Resolution	Horizontal	Vertical
SAFIRE	MO	N2O5 Conc	Russell	1255	Pyle	1251	AM	20% :: 10% :: 5% (20-55 km)	2/day	15 x 4 km :: G	3 km :: Strat
SAFIRE	MO	N2O Conc	Russell	1275	Schoberl			10% ::	1/day	25 x 1.5 dg :: 86S-86N	1.5 km :: 15-60 km
					Pyle	1270	AM	15% :: 5%	2/day	4 x 5 dg :: G	2 km :: Mid-atmos
					Grose	1269	AM	15% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
SAFIRE	MO	O3(P) Conc	Russell	1298	Grose	1294	BM	30% :: 10% :: 15% (110-180 km)	1/wk	30 x 4 dg :: G	3 km :: Mid-atmos
					Schoberl	1296	BM	15% :: 10%	1/wk [d]	30 x 4 dg :: G	3 km :: Mid-atmos
					Pyle	1295	BM	15% :: 5%	1/wk	8 x 10 dg :: G	3 km :: Strat
SAFIRE	MO	O3 Conc	Russell	1320	Bates	1305	AM	5-10% :: 1-5%	1/(18-72 s) [?]]	15 x 4 km :: G	2 km :: Strat
					Grose	1306	AM	2-5% :: 2%	2/day	4 x 4 dg :: G	1-1.5 km :: 10-80 km
					Murakami	1310	AM	10% ::	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
					Schoberl	1312	AM	10% :: 10%	1/day	4 x 5 dg :: G	2.5 km :: Trop
					Pyle	1311	AM	5% :: 2%	2/day	15 x 4 km :: G	3 km :: Strat
					Schoberl	1313	AM	10% :: 5%	1/day	2 x 3 dg :: G	1.5 km :: Mid-atmos
SAFIRE	MO	O3O3(NU1-3) Conc	Russell	1327	Schoberl	1313	AM	10% :: 5%	1/day	2 x 3 dg :: G	1.5 km :: Mid-atmos
					Schoberl			10% (20-40 km)	1/(36-72 s) [?]]	25 x 2.5-5 dg :: 86S-86N	3 km :: 20-35 km
SAFIRE	MO	O3(NU2) Conc	Russell	1329	Schoberl	1313	AM	10% :: 5%	1/day	2 x 3 dg :: G	1.5 km :: Mid-atmos
					Schoberl			10% (20-30 km)	1/(36-72 s) [?]]	25 x 2.5-5 dg :: 86S-86N	3 km :: 20-50 km
SAFIRE	MO	O3(OH8_OO) Conc	Russell	1344	Schoberl	1342	AM	10% :: 10%	1/wk	8 x 10 dg :: G	5 km :: Strat
					Schoberl			15% (20-35 km)	1/(36-72 s) [?]]	25 x 2.5-5 dg :: 86S-86N	3 km :: 20-40 km
SAFIRE	MO	O3(NH8OO) Conc	Russell	1345	Grose	1342	AM	10% :: 10%	1/wk	8 x 10 dg :: G	5 km :: Strat
					Grose	1355	BM	7% (30-75 km)	1/(36-72 s) [?]]	25 x 2.5-5 dg :: 86S-86N	3 km :: 20-90 km
					Schoberl	1356	BM	25% :: 10%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
					Pyle	1211	BM	10% :: 02a, 05m	1/day [d]	6 x 8 dg :: G	2 km :: Mid-atmos
SAFIRE	MO	Pressure	Russell	1326				20% :: 10%	2/day	15 x 4 km :: G	2 km :: Strat
					Grose	1516	AM	<2% (16-70 km)	1/(18-72 s) [?]]	25 x 1.5 dg :: 86S-86N	1.5 km :: 10-110 km
								005 :: 2%	2/day	15 x 4 dg :: G	3 km :: Mid-atmos
SAFIRE	MO	Temperature Profile	Russell	1610	Bates	1570	AM	<0.5K(16-65 km)	1/(18-72 s) [?]]	25 x 1.5 dg :: 86S-86N	1.5 km :: 10-110 km
					Grose	1572	AM	1K,2K,50km :: 3,1K>50km	2/day	4 x 4 dg :: G	1-1.5 km :: 10-80 km
					Bates	1569	AM \$	2 K :: 0.5 K	2/day	15 x 4 dg :: G	2 km :: Mid-atmos
					Hansen	1573	AM	1-2 K		1.8 x .16 dg :: G	3 km :: 20-60 km
					Pyle	1581	AM	0.3 C ::	1/wk	500 km :: G	Strat
					Schoberl	1582	AM	2 K :: 0.5 K	2/day	15 x 4 km :: G	2 km :: Strat
SAFIRE	MO	H2O Conc	Russell	1839				2 K :: 1 K	1/day	2 x 2 dg :: G	2 km :: Atmos
					Grose	1811	BM	5% (20-80 km)	1/(36-72 s) [?]]	25 x 2.5-5 dg :: 86S-86N	3 km :: 10-100 km
					Schoberl	1822	AM	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Trop/meso
					Hansen	1864	AM	10% :: 0.05	1/day	4 x 5 dg :: G	2.5 km :: Meso
					Hansen	1812	AM	3% ::	1/wk	500 km :: G	Column :: Strat
					Bates	1808	AM	3% ::	1/wk	500 km :: G	Atmos
					Schoberl	1821	AM	5-10% :: 1-5%	2/day	4 x 4 dg :: G	1-1.5 km :: 10-80 km
SAFIRE	MO	H2O (HDO) Conc	Russell	1857				10% :: 5%, 0.05s	1/day	2 x 3 dg :: G	1.5 km :: 0-Strat
					Schoberl			10% (20-50 km)	1/(36-72 s) [?]]	25 x 2.5-5 dg :: 86S-86N	3 km :: 10-60 km
					Schoberl	1856	BM	10% :: 10%	1/day	8 x 10 dg :: G	3 km :: Strat
SAGE-III	AERO-CHEM Aerosol Extinction Coef	McCormick	1012		Bates	1005	BM	5% :: 5%	1/(2 min), 30/day	<2 x <1 dg :: G	1 km :: 0-40 km
								1/(1-3 day) [few day]	100 km :: G	1 km :: Atmos	

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument			Instrument Output Data Product			IDS Input Requirements			Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type						
SAGE-III	AERO,CHEM Aerosol Extinction Coef	McCormick	1012	Dickinson	3374	BM				1/wk	<0.5-1 deg :: G	
				Mouginis-Mark	3264	BM				1/day	20 km :: G	3 km :: 0-15 km
				Hartmann	1002	BM		tau=0.02 ::				
				Sellers	1004	AM						
				Mouginis-Mark	3263	AM				1/wk		Strat
				Schoeberl	1010	AM-\$		10% :: 5%		1/day	200 km :: G	1 km :: Strat
				Grose	1006	AM-\$		20% :: 10%		2/day	15 x 4 dg :: G	2 km :: Strat
				Kerr, Sorochian	1007	AM-\$		5% :: 5%		1/day	25 km :: Land	3 km :: Atmos
				Hansen	2287	AM		tau=0.02 ::		1/wk	500 km :: G	Strat
				Murakami	2327	AM		5-10% ::				N/A :: Atmos
								10% :: 10%		1/(2 min), 30/day	<2 x <1 dg :: Polar	1 km :: 10-50 km
				Grose	1269	AM		15% :: 5%		2/day	30 x 4 dg :: G	3 km :: Mid-atmos
SAGE-III	AERO,CHEM NO2 Conc	McCormick	1276	Schoeberl	1271	AM		10% ::		1/day	4 x 5 dg :: G	2 km :: Mid-atmos
				Hansen	1372	AM-		2% ::		1/wk	500 km :: G	Strat
				Grose	1269	AM		15% :: 5%		2/day	30 x 4 dg :: G	3 km :: Mid-atmos
				Pyle	1270	AM		15% :: 5%		2/day	15 x 4 km :: G	3 km :: Strat
								10% :: 15%		1/(2 min), 30/day	<2 x <1 dg :: G	1 km :: 20-50 km
				Schoeberl	1271	BM		10% ::		1/day	4 x 5 dg :: G	2 km :: Mid-atmos
				Hansen	1372	AM-		2% ::		1/wk	500 km :: G	Strat
				Grose	1269	AM		15% :: 5%		2/day	30 x 4 dg :: G	3 km :: Mid-atmos
				Pyle	1270	AM		15% :: 5%		2/day	15 x 4 km :: G	3 km :: Strat
								10% :: 10%		1/(2 min), 30/day	<2 x <1 dg :: G	1 km :: 20-55 km
				Grose	1279	BM		20% :: 10%		1/day [n]	30 x 4 dg :: G	3 km :: Mid-atmos
				Pyle	1280	BM		25% :: 10%		1/day [n]	15 x 4 km :: G	3 km :: Strat
				6% :: 5%		1/(2 min), 30/day	<2 x <1 dg :: Polar	1 km :: 6-85 km				
SAGE-III	AERO,CHEM NO3 Conc	McCormick	1321	Murakami	1310	BM		10% ::				N/A :: TOA
				Bates	1305	AM		5-10% :: 1-5%		2/day	4 x 4 dg :: G	1-1.5 km :: 10-80 km
				Schoeberl	1313	AM		10% :: 5%		1/day	2 x 3 dg :: G	1.5 km :: Mid-atmos
				Hansen	1307	AM		3% ::		1/wk	500 km :: G	Atmos
				Schoeberl	1312	AM		10% :: 10%		1/day	4 x 5 dg :: G	2.5 km :: Trop
				Moore	1309	AM		25% :: 10%		1/day	100 km :: G	Atmos
				Pyle	1311	AM		5% :: 2%		2/day	15 x 4 km :: G	3 km :: Strat
				Grose	1306	AM		2%, 5% :: 2%		2/day	30 x 4 dg :: G	3 km :: Mid-atmos
								20% :: 20%		1/(2 min), 30/day	<2 x <1 dg :: G	2 km :: 15-25 km
				Grose	1349	BM		20% :: 10%		2/day	30 x 4 dg :: G	3 km :: Strat
				Schoeberl	1351	BM		20% :: 0.01		1/wk [n]	8 x 10 dg :: G	3 km :: Strat
				Pyle	1350	BM		25% :: 10%		2/day	15 x 4 km :: G	3 km :: Strat
				0.2 km :: 5%		1/(2 min), 30/day	<2 x <1 dg :: G	1 km :: Strat/Trop				
SAGE-III	AERO,CHEM Cloud Height, Top, PSC	McCormick	1437	Pyle	1404	BM				2/day		Strat
				Grose	3307	AM		20% :: 10%		2/day	15 x 4 dg :: G	2 km :: Strat
								2 K :: 2 K		1/(2 min), 30/day	<2 x <1 dg :: G	1 km :: 6-55 km
				Schoeberl	1582	BM		2 K :: 1 K		1/day	2 x 2 dg :: G	2 km :: Atmos
				Bates	1570	AM		1K,2K>50km :: 3:1K>50km		2/day	4 x 4 dg :: G	1-1.5 km :: 10-80 km
				Hansen	1573	AM		0.3 C ::		1/wk	500 km :: G	Strat
				Bates	1569	AM-\$		1-2 K		1/wk	1.8 x .16 dg :: G	3 km :: 20-60 km
				Pyle	1581	AM		2 K :: 0.5 K		2/day	15 x 4 km :: G	2 km :: Strat
								2 K :: 2 K		1/(2 min), 30/day	<2 x <1 dg :: Polar	1 km :: 6-70 km
				Schoeberl	1582	AM		2 K :: 1 K		1/day	2 x 2 dg :: G	2 km :: Atmos
				Hansen	1573	AM		0.3 C ::		1/wk	500 km :: G	Strat
SAGE-III	AERO,CHEM Temperature Profile	McCormick	1612									

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product				IDS Input Requirements							Accuracy	Temporal	Horizontal	Vertical
Instrument	Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.			
SAGE-III	AERO,CHEM H2O Conc	McCormick	1840		Hansen	1812	AM	10% :: 10% 3% ::	1/(2 min), 30/day	<2 x <1 dg :: Polar	500 km :: O	1 km :: 3-50 km :: Atmos		
SAGE-III	AERO,CHEM H2O Conc	McCormick	1841		Hansen	1864	AM	10% :: 15% 3% ::	1/(2 min), 30/day	<2 x <1 dg :: G	500 km :: O	1 km :: 3-50 km Column :: Strat :: Atmos		
					Hansen	1812	AM	3% ::	1/wk	500 km :: O	500 km :: O	1.5 km :: 0-Strat		
					Schoeberl	1821	AM	10% :: 5%,0.05s	1/day	2 x 3 dg :: O	2 x 3 dg :: O	1-1.5 km :: 10-80 km		
					Bates	1808	AM	5-10% :: 1-5%	2/day	4 x 4 dg :: G	4 x 4 dg :: G	3 km :: Strat		
					Pyle	1819	AM	10% :: 5%	2/day	15 x 4 km :: G	15 x 4 km :: G	N/A :: NA		
SOLSTICE	MO	Irradiance, UV Solar [0.0015 nm res.]	Rotman	2277				<5% :: <1%	1/hr	N/A :: N/A	N/A :: NA			
					Brewer	2275	BM	20% :: 5%	1/day, 1/week	30 m :: Ocean/L	30 m :: Ocean/L			
					Brewer	2276	BM	20% :: 5%	1/day, 1/week	20 km :: Ocean	20 km :: Ocean			
					Pyle	2273	BM	1%	2/day	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat		
					Schoeberl	2411	AM	5% :: 2%	1/day	:: G	:: G	Strat		
SOLSTICE	MO	Irradiance, UV Solar [0.1 nm res.]	Rotman	2278				<5% :: <1%	1/hr	N/A :: N/A	N/A :: NA			
					Schoeberl	2411	BM	5% :: 2%	1/day	:: G	:: G	Strat		
					Brewer	2275	BM	20% :: 5%	1/day, 1/week	30 m :: Ocean/L	30 m :: Ocean/L			
					Brewer	2276	BM	20% :: 5%	1/day, 1/week	20 km :: Ocean	20 km :: Ocean			
					Grose	2271	BM	5% :: 1%	2/day	15 x 4 dg :: G	15 x 4 dg :: G	TOA		
					Pyle	2273	BM	1%	2/day	15 x 4 km :: G	15 x 4 km :: G	3 km :: Strat		
SOLSTICE	MO	Level-1B Irradiance, SOLSTICE	Rotman	2398				20% :: 5%	1/hr	2 dg :: G	2 dg :: G	1 km :: Mid_atm		
STIKSCAT	CHEM	Wind Velocity, Sea_gfc	Freilich	1679				7%, 14% :: 5%, 10% 2 m/s :: 2 m/s	1/(2 day)	1 dg :: Ocean	1 dg :: Ocean	N/A :: Near_Sfc		
					Dickinson	3338	BM	10% :: 20% 1 m/s, 7 :: 1 m/s, 7	2 days	<0.5-1 dg :: Ocean	<0.5-1 dg :: Ocean	N/A :: Sfc		
					Harris	3434	BM	2 m/s :: 2 m/s	1/day	100 km :: Ocean/R	100 km :: Ocean/R	N/A :: Near_sfc		
					Rotbrock	1669	BM	10% ::	1/day	100 km :: Ocean	100 km :: Ocean	N/A :: Sfc		
					Barron	1657	BM	10% ::	1/wk	500 km :: Ocean	500 km :: Ocean	Strat		
					Hansen	1663	BM	0.5 m/s :: 2%	2/day	100 km :: G	100 km :: G	N/A :: Sfc		
					Lau	1739	AM	2 m/s :: 2 m/s	1/day	25 km :: Polar	25 km :: Polar	N/A :: Sfc		
					Rotbrock	1670	AM	5% 5 dg :: 0.1 m/s, 1 dg	1/day	25 km :: Ocean [South Atlan]	25 km :: Ocean [South Atlan]	N/A :: Sfc		
					Srokosz	1684	AM	2 m/s :: 2 m/s	1/day	50 km :: Ocean	50 km :: Ocean	N/A :: Sfc		
					Hartmann	1664	AM	10% :: 16 dg	1/day	25 km :: Ocean	25 km :: Ocean	N/A :: Sfc		
STIKSCAT	CHEM	Wind Velocity, Sea_gfc	Freilich	1680				10% <20dg :: 5% :: 10%: 20 dg	1/(1-2 day)	25 km :: Ocean [Southern]	25 km :: Ocean [Southern]	N/A :: Sfc		
					Abbott	1753	BM	10% <20dg :: 5% :: 10%: 20 dg	1 day	25 km :: Ocean	25 km :: Ocean	N/A :: Near_sfc		
					Bates	1658	BM	10 dg :: 10 dg	1/day	25 km :: Ocean	25 km :: Ocean	N/A :: Sfc		
					Harris	3433	BM	1 :: 1	1/day	25 km :: Ocean	25 km :: Ocean	N/A :: Sfc		
					Liu	1702	BM	2 m/s :: 2 m/s	1/day	25 km :: Ocean	25 km :: Ocean	N/A :: Sfc		
					Liu	1713	BM	1 m/s :: 0.1 m/s	1/day	25 km :: Ocean	25 km :: Ocean	N/A :: Sfc		
					Rotbrock	1670	BM	5% 5 dg :: 0.1 m/s, 1 dg	1/day	25 km :: Ocean [South Atlan]	25 km :: Ocean [South Atlan]	N/A :: Sfc		
					Srokosz	1716	BM	10 dg :: 1 dg	1/day	25 km :: Ocean [South Atlan]	25 km :: Ocean [South Atlan]	N/A :: Sfc		
					Srokosz	1684	BM	2 m/s :: 2 m/s	1/day	50 km :: Ocean	50 km :: Ocean	N/A :: Sfc		
					Srokosz	1703	BM	1 m/s, 7 :: 1 m/s, 7	1/day	10 km :: Ocean/R	10 km :: Ocean/R	N/A :: Sfc		
					Hartmann	1664	BM	1 m/s, 7 :: 1 m/s, 7	1/day	<0.5-1 dg :: Ocean	<0.5-1 dg :: Ocean	N/A :: Sfc		
					Barron	1653	BM	1 m/s, 7 :: 1 m/s, 7	1/day	100 km :: Ocean	100 km :: Ocean	N/A :: Sfc		
					Dickinson	3338	AM	2 m/s :: 2 m/s	1/day	100 km :: Ocean	100 km :: Ocean	N/A :: Sfc		
					Barron	1657	AM	2 m/s :: 2 m/s	1/day	100 km :: Ocean	100 km :: Ocean	N/A :: Near_sfc		
STIKSCAT	CHEM	Wind Stress	Freilich	1746				2 m/s :: 2 m/s	1/day	100 km :: Ocean	100 km :: Ocean	N/A :: Sfc		
					Rotbrock	1669	AM	2 m/s :: 2 m/s	1/day	100 km :: Ocean	100 km :: Ocean	N/A :: Sfc		
					Bates	1742	BM	2 m/s :: 2 m/s	1/day	100 km :: Ocean	100 km :: Ocean	Strat		

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument			Instrument Output Data Product			IDS Input Requirements		Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
STIKSCAT	Platform	Product Name	TM	Prod #	Investigator	Prod #	Match Type				
	CHEM	Wind Stress	Fretlich	1746	Lau	1743	BM	0.01 ::			N/A :: Sic
					Munkani	1744	BM	0.01 ::			N/A :: Sic
					Topley	1745	BM	10% ::	4/day	50 km :: Ocean	N/A :: Sic
STIKSCAT	CHEM	Level-1B Backscatter Coef	Fretlich	2108				:: 0.25 dB		25 km :: G	N/A :: Sfc
					Brewer	2097	BM	10% :: TBD	1/day, 1/sec	25 km :: Ocean	N/A :: Sfc
					Srokosz	2109	BM	0.3 dB :: 0.1 dB	1/day	25 km :: Ocean [South Atlan]	N/A :: Sfc
TES	CHEM	CH4 Conc	Beer	1087				:: 14 ppb	1/(16 day)	16 x 5 km :: G	4-6 km :: 0-12 km
					Grose	1074	AM	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
					Pyle	1077	AM	10% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
					Hansen	1075	AM	0.10% ::	1/wk	500 km :: Wetlands	:: Trop
					Hansen	1076	AM		1/wk	500 km :: G	:: Trop
TES	CHEM	CH4 Conc	Beer	1088				:: 30 ppb	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km
					Grose	1074	AM	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
					Pyle	1077	AM	10% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
					Schoeberl	1078	AM	15% :: 0.05	1/day	2 x 3 dg :: G	1.5 km :: Strat
TES	CHEM	CH4 Conc	Beer	1089				:: 40 ppb	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km
					Hansen	1075	BM	0.10% ::	1/wk	500 km :: Wetlands	:: Trop
					Hansen	1076	BM		1/wk	500 km :: G	:: Trop
					Grose	1074	AM	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
					Pyle	1077	AM	10% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
TES	CHEM	CO Conc	Beer	1127				:: 10 ppb	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km
					Schoeberl	1121	AM	15% :: 5	1/day	8 x 10 dg :: G	3 km :: Mid-atmos
					Pyle	1119	AM	15% :: 5%	2/day	15 x 4 km :: G	2 km :: Strat
TES	CHEM	CO Conc	Beer	1128				:: 15 ppb	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km
					Hansen	1117	AM	0.10% ::	1/wk	500 km ::	:: Trop
					Grose	1116	AM	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
					Schoeberl	1120	AM	15% :: 5	1/day	2 x 3 dg :: G	2 km :: Trop
TES	CHEM	CO Conc	Beer	1129				:: 3 ppb	1/(16 day)	16 x 5 km :: G	4-6 km :: 0-12 km
					Dickinson	3325	AM				
					Hansen	1117	AM	0.10% ::	1/wk	500 km ::	:: Trop
					Schoeberl	1120	AM	15% :: 5	1/day	2 x 3 dg :: G	2 km :: Trop
TES	CHEM	HN03 Conc	Beer	1205				:: 3 ppt	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km
					Grose	1198	AM	20% :: 5%	2/day	30 x 10 dg :: G	3 km :: Mid-atmos
					Pyle	1199	AM	15% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
TES	CHEM	HN03 Conc	Beer	1206				:: 3 ppt	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km
					Schoeberl	1200	AM	15% :: 0.1	1/day	2 x 3 dg :: G	2 km :: Strat
					Pyle	1199	AM	15% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
TES	CHEM	N2O Conc	Beer	1243				:: 10 ppt	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km
					Grose	1229	AM	15% :: 5%	1/day	30 x 4 dg :: G	3 km :: Mid-atmos
					Schoeberl	1232	AM	15% :: 10	1/day	2 x 3 dg :: G	2 km :: Strat
TES	CHEM	NH3 Conc	Beer	1256				:: 300 ppt	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km
					Hansen	1372	AM	2% ::	1/wk	500 km :: G	:: Trop
TES	CHEM	NO Conc	Beer	1268				:: 25 ppt	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km
					Schoeberl	1264	AM	15% :: 2x1.0m	1/day[d]	4 x 5 dg :: G	2 km :: Mid-atmos
					Grose	1262	AM	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
					Pyle	1263	AM	15% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat
TES	CHEM	NO2 Conc	Beer	1278				:: 500 ppt	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km
					Grose	1269	AM	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument Output Data Product												
Instrument	Platform	Product Name	TM	Prod #	IDS Input Requirements			Accuracy	Temporal	Horizontal	Vertical	
					Investigator	Prod #	Match Type	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	
TES	CHEM	NO2 Conc	Beer	1278	Schoeberl	1271	AM	10% ::	1/day	4 x 5 dg :: G	2 km :: Mid-atmos	
					Pyle	1270	AM	15% :: 5% :: 20 ppb	2/day	15 x 4 km :: G	3 km :: Strat	
TES	CHEM	O3 Conc	Beer	1323	Murkumi	1310	AM	10% ::	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km	
					Hansen	1307	AM	3% ::	1/wk	500 km :: G	N/A :: TOA	
TES					Schoeberl	1313	AM	10% :: 5%	1/day	2 x 3 dg :: G	1.5 km :: Mid-atmos	
					Pyle	1311	AM	5% :: 2%	2/day	15 x 4 km :: G	3 km :: Strat	
					Murkumi	1310	AM	10% ::	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km	
					Hansen	1307	AM	3% ::	1/wk	500 km :: G	N/A :: TOA	
					Schoeberl	1312	AM	10% :: 10%	1/day	4 x 5 dg :: G	2.5 km :: Trop	
TES					Moore	1309	AM	25% :: 10%	1/day	100 km :: G	Atmos	
					Pyle	1311	AM	5% :: 2%	2/day	15 x 4 km :: G	3 km :: Strat	
								13 ppb	1/(16 day)	16 x 5 km :: G	4-6 km :: 0-12 km	
					Murkumi	1310	AM	10% ::			N/A :: TOA	
					Schoeberl	1312	AM	10% :: 10%	1/day	4 x 5 dg :: G	2.5 km :: Trop	
TES					Hansen	1307	AM	3% ::	1/wk	500 km :: G	Atmos	
					Moore	1309	AM	25% :: 10%	1/day	100 km :: G	Atmos	
								600 ppt	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km	
					Mouginia-Mark	3289	BM		1/day	1 km :: G	N/A :: Plume_col	
					Mouginia-Mark	3288	BM		[near-real time ?]	1 km :: G	N/A :: Plume_col	
TES					Schoeberl	1366	AM	20% ::	1/wk	8 x 10 dg :: G	3 km :: Strat	
								2 K	1/(16 day)	16 x 5 km :: G	1 km, 4-6 km :: 0-12 km	
					Isacks	1576	AM	1 :: 0.4	1/wk	50 km :: Land/R	1 km :: Trop	
					Hartmann	1575	AM	1 :: 1	1/day	10 km :: Ocean	1 km :: 0-15 km	
					Barron	1565	AM	1 K :: 0.5 K	1/day	10 km :: R	1 km :: Trop	
TES					Pyle	1581	AM	2 K :: 0.5 K	2/day	15 x 4 km :: G	2 km :: Strat	
					Schoeberl	1582	AM	2 K :: 1 K	1/day	2 x 2 dg :: G	2 km :: Atmos	
					Srokosz	1584	AM	1 K :: 0.1 K	2/day	10 km :: Ocean [South Atlan]		
								2 K	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km	
					Pyle	1581	AM	2 K :: 0.5 K	2/day	15 x 4 km :: G	2 km :: Strat	
TES					Schoeberl	1582	AM	2 K :: 1 K	1/day	2 x 2 dg :: G	2 km :: Atmos	
								2 K	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km	
					Schoeberl	1582	AM	2 K :: 1 K	1/day	2 x 2 dg :: G	2 km :: Atmos	
					Grose	1811	AM	50 ppm	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km	
					Tapley	1825	AM	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Trop/paseo	
TES					Hansen	1813	AM	5% ::	4/day	50 km :: G	1 km :: Atmos	
								3% ::	1/wk	500 km :: G	Atmos	
								0.5 ppm	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km	
					Hansen	1864	BM	3% ::	1/wk	500 km :: G	Column :: Strat	
					Bates	1808	AM	5-10% :: 1-5%	2/day	4 x 4 dg :: G	1-1.5 km :: 10-80 km	
TES					Pyle	1819	AM	10% :: 5%	2/day	15 x 4 km :: G	3 km :: Strat	
					Schoeberl	1821	AM	10% :: 5% :: 0.05s	1/day	2 x 3 dg :: G	1.5 km :: 0-Strat	
								50 ppm	1/(16 day)	16 x 5 km :: G	4-6 km :: 0-12 km	
					Isacks	1815	AM	10% :: 0.05	1/wk	50 km :: Land/R	2 km :: Trop	
					Barron	1806	AM	10% :: 5%	1/day	10 km :: R	Atmos	
TES					Hansen	1813	AM	3% ::	1/wk	500 km :: G	Atmos	
					Schoeberl	1821	AM	10% :: 5% :: 0.05s	1/day	2 x 3 dg :: G	1.5 km :: 0-Strat	
								10% :: 5% :: 0.05s	1/(16 day)	16 x 5 km :: L		
								10% :: 5% :: 0.05s	1/day	2 x 3 dg :: G	1.5 km :: 0-Strat	
								10% :: 5% :: 0.05s	1/(16 day)	16 x 5 km :: L		

Appendix M: IDS Input Requirements and Match Products by Instrument

Instrument	Platforms	Instrument Output Data Product			IDS Input Requirements		Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
		Product Name	TM	Prod #	Investigator	Prod # Match Type				
TES	CHEM	CO2 Conc	Beer	3637	Sellers	1141 BM		1/(16 day)	16 x 5 km :: L	
					Grose	1138 BM	1% :: 0.5%	1/mo	2M :: G	10 km :: Mid-atmos
					Hansen	1139 BM	0.2 ppm ::	1/wk	500 km :: G	:: Trop
					Kerr, Sorooshian	1140 BM	15% :: 15%	1/day	50 km :: G	1 km :: Atmos
TES	CHEM	HCl Conc	Beer	3638				1/(16 day)	16 x 5 km :: L	
					Mouginis-Mark	3283 BM		1/day	:: G	N/A :: Plume, col

**IDS Input Requirements
Not Met by
EOS Instruments
until Year 2001**

Appendix N

Science Processing Support Office (SPSO)

Goddard Space Flight Center

August 1992

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy		Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #	Match	Abs :: Rel					
Abbott	Ocean Wave Height, Significant	3130	ALT	ALT	Fu	3129	AM	10% :: 5%		10-20 km :: Ocean [Southern]		N/A :: Sfc	
Abbott	Pigment Conc, Phycoerythrin	2584	HIRIS	AM2	Davis, Melack	3072	AM-	50% :: 20%		1-4 km :: Ocean [Southern]		N/A :: TOO	
Abbott	Sea Level Height	3105	ALT	ALT	Fu	3112	BM	100% :: 50%		60-90 m :: Ocean-I/L		N/A :: TOO	
Abbott	Wind Speed, Sea_sfc	1707	ALT	ALT	Fu	3108	BM	5 cm :: 3 cm		10-20 km :: Ocean [Southern]		N/A :: Sfc	
Abbott	Wind Speed, Sea_sfc	1708	ALT	ALT	Fu	1735	BM	10 cm :: 5 cm		25 km :: Ocean		N/A :: Sfc	
Abbott	Wind Velocity, Sea_sfc	1753	STIKSCAT	CHEM	Frelich	1680	BM	10% :: 5%		25 km :: Ocean [Southern]		N/A :: Sfc	
Barron	Cloud Cover	2049	GLRS-A	ALT	Spinthorne	2078	AM	10% < 20deg :: 5%		25 km :: Ocean [Southern]		N/A :: Sfc	
Barron	Cloud Cover	2050	GLRS-A	ALT	Spinthorne	2078	AM	10% :: 5%		10-20 km :: G		N/A :: Cloud	
Barron	Cloud Cover	2051	HIRIS	AM2	Welch	2079	BM	5 :: 5		10-20 km :: G		N/A :: Cloud	
Barron	Cloud Height, Base	1382	HIRIS	AM2	Welch	1390	BM	1% :: 1%		10-20 km :: G		N/A :: Cloud	
Barron	Cloud Height, Top	1413	GLRS-A	ALT	Spinthorne et al	1425	AM	1% :: 0.5%		30 m :: L		100 m :: Cloud	
Barron	Cloud Height, Top	1414	HIRIS	AM2	Welch, Goetz	1426	BM	100 m :: 50 m		30 m :: L		100 m :: Cloud	
Barron	Cloud Optical Depth	2303	HIRIS	AM2	Welch	2309	BM	50 m :: 50 m		10 km :: R		100 m :: Cloud	
Barron	Drainage_Network Structure	2905	HIRIS	AM2	Kieffer, Clark	2884	AM-	100 m :: 25 m		200 m :: G		75 m :: Cloud	
Barron	Humidity Profile	1806	TES	CHEM	Beer	1844	AM	100 m :: 250 m		30 m :: L		100 m :: Cloud	
Barron	Ice_Sheet Elevation	2906	ALT	ALT	Zwally	2911	BM	75 m :: 75 m		200 m :: G		75 m :: Cloud	
Barron	Ice_Sheet Elevation	2907	GLRS-A	ALT	Bentley	2912	AM	3% :: 3%		30 m :: L		N/A :: Cloud	
Barron	Ice_Sheet Thickness	3053	ALT	ALT	Zwally	2911	BM	3% :: 1.5%		30 m :: Land/L		N/A :: Sfc	
Barron	Ice_Sheet Thickness	3054	GLRS-A	ALT	Bentley	2912	BM-	30 m :: 30 m		30 m :: L		N/A :: Sfc	
Barron	Ice_Sheet Velocity	2929	GLRS-A	ALT	Bentley	2897	BM	100 :: 100		10 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			GLRS-A	ALT	Bentley	2897	BM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	
			HIRIS	AM2	Kieffer	2895	AM	100 :: 5m-5m ::		15 km :: Land/Cryo		N/A :: Sfc	

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy Abs :: Rel	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #			
Barron	Ice Sheet Velocity	2929	HIRIS	AM2	Kieffer	2930	AM	100 m :: Land/Cryo	N/A :: Sfc
Barron	PBL Height	1510	GLRS-A	ALT	Spinhirne et al	1514	BM	10 km :: R	100 m :: Mixed by
Barron	PBL Height	1511	GLRS-A	ALT	Spinhirne et al	1514	BM	2-200 km :: G	75 m :: Trop
Barron	Precipitable Water	1859	HIRIS	AM2	Goetz	1873	BM	100 km :: G	100 m :: Mixed by
Barron	Snow Cover	3004	HIRIS	AM2	Dozier	3019	BM	2-200 km :: G	75 m :: Trop
Barron	Soil Composition	2795	HIRIS	AM2	Rowan, Clark	2766	AM	30 m :: L	Column :: Trop
Barron	Soil Extent	2799	HIRIS	AM2	Rowan, Clark	2772	AM	30 m :: Land/L	Column :: Trop
Barron	Soil Proportion, Bare	2787	HIRIS	AM2	Rowan, Clark	2776	AM	30 m :: Land/L	N/A :: Sfc
Barron	Suspended Solids Conc. Lake Water	2804	HIRIS	AM2	Rowan, Clark	2784	AM	30 m :: Land/L	N/A :: Sfc
Barron	Temperature Profile	1565	TES	CHEM	Beer	1614	AM	30 m :: Land/L	N/A :: Sfc
Barron	Vegetation Biomass, Dead	2612	HIRIS	AM2	Ustin, Westman	2614	BM	30 m :: Land/L	N/A :: Sfc
Barron	Vegetation Biomass, Dead	2613	HIRIS	AM2	Ustin, Westman	2614	BM	30 m :: Land/L	N/A :: Sfc
Barron	Vegetation Biomass, Green	2615	HIRIS	AM2	Ustin, Westman	2620	BM	30 m :: Land/L	N/A :: Sfc
Barron	Vegetation Biomass, Green	2616	HIRIS	AM2	Ustin, Westman	2620	BM	30 m :: Land/L	N/A :: Sfc
Barron	Vegetation Extent	2715	HIRIS	AM2	Ustin, Westman	2741	BM	30 m :: Land/L	N/A :: Sfc
Barron	Vegetation Index, Leaf Area, (LAI)	2675	HIRIS	AM2	Ustin et al	2746	AM	30 m :: Land/L	N/A :: Sfc
Barron	Vegetation Structure	2639	HIRIS	AM2	Ustin	2656	AM	30 m :: Land/L	N/A :: Sfc
Barron	Vegetation Structure	2640	HIRIS	AM2	Ustin	2657	AM	30 m :: Land/L	N/A :: Sfc
Barron	Vegetation Type	2728	HIRIS	AM2	Ustin, Westman	2741	AM	30 m :: Land/L	N/A :: Sfc
Barron	Vegetation Type	2729	HIRIS	AM2	Ustin, Westman	2644	AM	30 m :: Land/L	N/A :: Sfc
Barron	Vegetation Type	2729	HIRIS	AM2	Ustin, Westman	2644	AM	30 m :: Land/L	N/A :: Sfc

IDS Input Data Product		EOS Instrument Output Data Product			Accuracy		Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #	Match		
Barron	Vegetation Type Boundaries	2739							
			HIRIS	AM2	Weisman	2644	BM	30 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Ustin et al	2746	AM	30 m :: Land/L	N/A :: Sfc
Barron	Wind Velocity, Sea_gfc	1653						10 km :: Ocean/R	N/A :: Sfc
			STIKSCAT	CHEM	Freilich	1680	BM	25 km :: Ocean	N/A :: Near Sfc
Barron	Wind Velocity, Sea_gfc	1657						100 km :: Ocean	N/A :: Sfc
			STIKSCAT	CHEM	Freilich	1679	BM	1 dg :: Ocean	N/A :: Near Sfc
			STIKSCAT	CHEM	Freilich	1680	AM	25 km :: Ocean	N/A :: Near Sfc
Bates	Aerosol Layer Boundary Height	1013						2-200 km :: G	75 m :: Atmos
			GLRS-A	ALT	Spinhrne et al	1014	BM	150 m ::	75 m :: Atmos
Bates	Aerosol XXX	1005						100 km :: G	1 km :: Atmos
			HIRDLS	CHEM	Barnett, Gille	1992	BM	4 x 4 dg :: G	1 km :: 7-30 km
Bates	Cloud Cover, Cirrus	2069						100 km :: G	0.5 km :: Trop
			GLRS-A	ALT	Spinhrne	1410	AM	1-10 km :: G	75 m ::
			GLRS-A	ALT	Spinhrne	1400	AM	2-10 km :: G	75 m ::
			GLRS-A	ALT	Spinhrne	2078	AM	10-200 km :: G	N/A ::
Bates	Cloud Cover, Cirrus	2072						15 x 45 km :: G	N/A :: Cloud
			GLRS-A	ALT	Spinhrne	1410	AM	1-10 km :: G	75 m ::
			GLRS-A	ALT	Spinhrne	1400	AM	2-10 km :: G	75 m ::
			GLRS-A	ALT	Spinhrne	2078	AM	10-200 km :: G	N/A ::
Bates	Cloud Height, Base	1383						25 km :: G	100 mb :: Cloud
			GLRS-A	ALT	Spinhrne et al	1389	AM	2-100 km :: G	75 m :: Cloud
Bates	Cloud Height, Cirrus	1401						50 km :: G	N/A :: Cloud
			GLRS-A	ALT	Spinhrne	1410	AM	1-10 km :: G	75 m ::
			GLRS-A	ALT	Spinhrne	1400	AM	2-10 km :: G	75 m ::
Bates	Cloud Height, Stratoform	1406						50 km :: G	N/A :: Cloud
			GLRS-A	ALT	Spinhrne	1400	BM	2-10 km :: G	75 m ::
Bates	Cloud Liq_water Content	1894						1 x 1 dg :: G	100 mb :: Cloud
			MLS	MO	Walters	1898	AM	1/16 hr	100 mb :: Cloud
Bates	Cloud Optical Depth	2304						1/day [z. mean]	2.5 km [1.2] :: Upper Trop
			GLRS-A	ALT	Spinhrne et al	2308	AM	1/day	N/A :: Cloud
Bates	Geopotential Height Gradient	1499						15 x 45 km :: G	N/A :: Cloud
			HIRDLS	CHEM	Barnett, Gille	1500	BM	4 x 4 dg :: G	1-1.5 km :: Atmos
Bates	H2O Conc	1808						4 x 4 dg :: G	1 km :: 15-80 km
			HIRDLS	CHEM	Barnett, Gille	1837	BM	4 x 4 dg :: G	1-1.5 km :: 10-80 km
			HIRDLS	CHEM	Barnett, Gille	1838	AM	2/day [d.n]	1 km :: 7-80 km
			MLS	MO	Walters	1839	AM	2/day [d.n]	2.5 km [1.2] :: TPSE, 100 km
			SAFIRE	MO	Russell	1839	AM	0.1 x 2.5 dg :: 82N-82S	3 km :: 10-100 km
			TES	CHEM	Beer	1843	AM	25 x 2.5 dg :: 86S-86N	2-3 km :: 13-30 km
Bates	O3 Conc	1305						160 x 23 km :: G	2-3 km :: 13-30 km
			HIRDLS	CHEM	Barnett, Gille	1318	BM	4 x 4 dg :: G	1-1.5 km :: 10-80 km
			MLS	MO	Walters	1319	AM	4 x 4 dg :: G	1 km :: 7-80 km
			SAFIRE	MO	Russell	1320	AM	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 110 km
Bates	Ocean Wave Height	3126						25 x 2.5 dg :: 86S-86N	1.5-3 km :: 10-100 km
			ALT	ALT	Fu	3129	AM	1/(18-72 s) [7]	N/A :: Sfc
Bates	Ocean Wave Height, Along-track	3128						50-75 m :: Ocean	N/A :: Sfc
			ALT	ALT	Fu	3129	AM	7 km :: Ocean	N/A :: Sfc
			ALT	ALT	Fu	3129	BM	7 km :: Ocean	N/A :: Sfc

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product			EOS Instrument Output Data Product					Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #	Match	Abs :: Rel			
Bates	PBL Height	1512	GLRS-A	ALT	Spinburne et al	1514	BM	75 m :: 150 m ::	1/(2-16 day)	2-200 km :: G	75 m :: Trop
Bates	Sea_Level Height, Along-track	3111						10 cm ::	10 cm ::	7 km :: Ocean	N/A :: S/c
Bates	Temperature Profile	1569	ALT	ALT	Fu	3112	BM	10 cm :: :: 1-2 K		7 km :: Ocean	N/A :: S/c
			HIRDLS	CHEM	Barnett, Gille	1608	AM	1K;2K<50km :: 0.3K;1K>50km	2/day [d,n]	1.8 x .16 dg :: G	3 km :: 20-60 km
			GGI	ALT	Melbourne	1606	AM	1 K :: 1 K	700 re/day	4 x 4 dg :: G	1 km :: 7-80 km
			GGI	ALT	Melbourne	1605	AM	1 K :: 1 K	700 re/day	1-200 km :: G	1 km :: 2-550-60 km
			MLS	MO	Waters	1609	AM	:: 2K <100km	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	1 km :: 5 - 50 km
			SAFIRE	MO	Russell	1610	AM	:: <.05K(16-65 km)	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	2.5 km [1,2] :: TPSE, 120 km
Bates	Temperature Profile	1570						1K;2K>50km :: 3;1K>50km	2/day	4 x 4 dg :: G	1-1.5 km :: 10-80 km
			HIRDLS	CHEM	Barnett, Gille	1608	BM	1K;2K<50km :: 0.3K;1K>50km	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-80 km
			SAFIRE	MO	Russell	1610	AM	:: <.05K(16-65 km)	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	1.5 km :: 10-110 km
			MLS	MO	Waters	1609	AM	:: 2K <100km	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1,2] :: TPSE, 120 km
Bates	Tropopause Height, Aerosol_located	1642	GLRS-A	ALT	Spinburne et al	1014	BM	75 m :: 150 m ::	1/(2-16 day)	200 km :: G	75 m :: Trop
Bates	Vegetation Index, Leaf Area (LAI)	2676						20% :: 10%	1/mo	60 m :: Land	N/A :: S/c
Bates	Wind Stress	1742	HIRIS	AM2	Ustin et al	2746	AM		1/(2-16 day)	30 m :: Land/L	N/A :: S/c
										:: Ocean	:: S/c
			STIKSCAT	CHEM	Frellich	1746	BM				
Bates	Wind Velocity, Geostrophic	1685						2 m/s ::	2/day		
			HIRDLS	CHEM	Barnett, Gille	1687	BM	3 mb :: 3 m/s	2/day [d,n]	4 x 4 dg :: G	1-1.5 km :: Atmos
								:: 10%; 20 dg		4 x 4 dg :: G	1 km :: 7-80 km
Bates	Wind Velocity, Sea_gfc	1658						:: 10%; 16 deg	1/(2 day)	25 km :: Ocean	N/A :: Near_gfc
Brewer	Gelbstoff Absorption Coef@300nm	3213	STIKSCAT	CHEM	Frellich	1680	BM	50% :: 10%	1/day, l/seas	30 m :: Ocean/L	N/A :: TOO
			HIRIS	AM2	Carder, Melack	3215	BM-	50% :: 25%	1/(2 day) [d]	30-90 m :: Ocean-1/L	N/A :: TOO
Brewer	Gelbstoff Absorption Coef@300nm	3214						50% :: 10%	1/day, l/seas	20 km :: Ocean	N/A :: TOO
			HIRIS	AM2	Carder, Melack	3215	BM-	50% :: 25%	1/(2 day) [d]	30-90 m :: Ocean-1/L	N/A :: TOO
Brewer	Irradiance, UV Solar	2275						20% :: 5%	1/day, l/seas	30 m :: Ocean/L	
			SOLSTICE	MO	Rottman	2278	BM	<5% :: <1%	1/hr	N/A :: N/A	N/A :: NA
			SOLSTICE	MO	Rottman	2277	BM	<5% :: <1%	1/hr	N/A :: N/A	N/A :: NA
Brewer	Irradiance, UV Solar	2276						20% :: 5%	1/day, l/seas	20 km :: Ocean	
			SOLSTICE	MO	Rottman	2278	BM	<5% :: <1%	1/hr	N/A :: N/A	N/A :: NA
			SOLSTICE	MO	Rottman	2277	BM	<5% :: <1%	1/hr	N/A :: N/A	N/A :: NA
			SOLSTICE	MO	Rottman	2398	AM-		1/hr	2 dg :: G	1 km :: Mid_atm
Brewer	Land_gfc Reflectance, Directional	2427						3% :: 1%	1/day, l/seas	22 km :: Ocean/L	N/A :: S/c
			HIRIS	AM2	Gerstl	2035	AM	5% :: 5%	1/(16 day)	30 m :: Land/L	N/A :: S/c
Brewer	Level-1B Backscatter, STIKSCAT	2097						10% :: TBD	1/day, l/seas	25 km :: Ocean	N/A :: S/c
			STIKSCAT	CHEM	Frellich	2108	BM	:: 0.25 dB		25 km :: G	N/A :: S/c
Brewer	Level-2 Radiance, Water-leaving	2414						10% :: TBD	1/day, l/seas	30 m :: Ocean/L	N/A :: TOO
			HIRIS	AM2	Goetz	2370	BM				
Brewer	Ocean Productivity, Primary	2600						50% :: 5%	1/day, l/seas	30 m :: Ocean/L	N/A :: TOO
			HIRIS	AM2	Javis, Melack et al	2601	BM	100% :: 50%	1/(>=2 day)	30-90 m :: Ocean/L	N/A :: TOO
Brewer	Organic Carbon Conc, Dissolved	2562						100% :: 10%	1/day, l/seas	30 m :: Ocean/L	N/A :: TOO
			HIRIS	AM2	Carder, Melack	3314	BM	100% :: 50%	(>=2)/day	30-90 m :: Ocean/L+Land/Lakes	N/A :: TOO
Brewer	Sea_Level Height	3106						5% :: 1%	1/day, l/seas	7 km :: Ocean	N/A :: S/c
			ALT	ALT	Fu	3112	BM	10 cm ::			N/A :: S/c

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product			EOS Instrument Output Data Product				Accuracy		Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #	Abs :: Rel	Scn et al ::			
Brewer	Sea Level Height	3106	ALT	ALT	Fu	3108	BM	Match	1/(16 day)	25 km :: Ocean	N/A :: Sfc
Cihlar	Vegetation Reflectance, Bi-directional, (BRDF)	3496	HIRIS	AM2	Gerd	2035	AM	0.05 :: 0.001 5% :: 5%	1 wk (for 1 yr) 1/(16 day)	:: Canada/R 30 m :: Land/L 1 km :: Canada/R	N/A :: Sfc N/A :: Sfc N/A :: Sfc
Cihlar	Vegetation Structure	3502	HIRIS	AM2	Ustin	2656	BM	40% :: 20%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc
Cihlar	Vegetation Type	3504	HIRIS	AM2	Ustin, Westman	2741	AM	20% :: 10%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc
Dickinson	Albedo, Cloud	3361	HIRIS	AM2	Wells	2644	BM	15% :: 15%	once	100 m :: Canada/R	N/A :: Sfc
Dickinson	Albedo, Snow	3364	HIRIS	AM2	Ustin et al	2746	AM	10% :: 10%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc
Dickinson	CO Conc	3325	HIRIS	AM2	Wells	2008	BM	20% :: 10%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc
Dickinson	Cloud Drop Size-distribution	3348	TES	CHEM	Beer	1129	AM	5% :: 5%		<0.5-1 deg :: G	:: Cloud
Dickinson	Cloud Liq-water Content	3357	HIRIS	AM2	Wells	1776	BM	5% :: 1%	1/(16 day)	16 x 5 km :: G	4-6 km :: 0-12 km
Dickinson	Cloud Optical Depth, SW	3382	HIRIS	AM2	Wells	1898	AM	20% :: 10%	1/(2-16 day)	<0.5-1 deg :: G	:: Cloud
Dickinson	Cloud Pressure, Top	3330	MLS	MO	Waters	2308	AM	0.1 ::	1/day [z. mean]	0.1 x 2.5 deg :: 82N-82S	2.5 km [1.2] :: Upper Trop
Dickinson	PBL Height	3329	GLRS-A	ALT	Spinthorne et al	1531	AM	5-10% :: 5-10%	2/day [d.n]	<0.5-1 deg :: G	N/A :: Cloud
Dickinson	Vegetation Biomass, Green	3397	HIRIS	AM2	Barnett, Gille	1514	BM	150m ::		4 x 4 deg :: G	0.4 km :: Trop
Dickinson	Vegetation Extent	3400	GLRS-A	ALT	Spinthorne et al	2620	BM	30% :: 15%	1/(2-16 day)	2-200 km :: G	75 m :: Trop
Dickinson	Vegetation Height	3402	HIRIS	AM2	Ustin, Westman	2741	BM	20% :: 10%	1/(2-16 day)	<0.5-1 deg :: Land	N/A :: Sfc
Dickinson	Vegetation Type	3405	HIRIS	AM2	Ustin, Westman	2644	AM	10% :: 10%	1/(2-16 day)	High res :: Land	N/A :: Sfc
Dickinson	Wind Velocity, Sea_sfc	3338	STIKSCAT	CHEM	Freilich	1679	BM	10% :: 10%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc
Dotier	Albedo, Spectral, Land_sfc	2020	STIKSCAT	CHEM	Freilich	1680	AM	5% :: 1%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc
Dotier	Snow Contaminant Conc	2767	HIRIS	AM2	Dozier	2440	AM	5% :: 1%	1/wk, 1/mo	50 m :: Land/L	N/A :: Sfc
Dotier	Snow Cover	3008	HIRIS	AM2	Dozier	2768	BM	20% :: 20%	1/wk, 1/mo	50 m :: Land/L	N/A :: Sfc
Dotier	Snow Cover, Wet	3028	HIRIS	AM2	Dozier	3019	BM	10% :: 10%	1/wk, 1/mo	50 m :: Snow/L	N/A :: Sfc
			HIRIS	AM2	Dozier	3030	BM	10% :: 10%	1/wk, 1/mo	50 m :: Snow/L	N/A :: Sfc
			HIRIS	AM2	Dozier	3029	AM	5% :: 2%	1/wk, 1/mo	50 m :: Cryo/L	N/A :: Sfc
			HIRIS	AM2	Dozier	3029	AM	5% :: 2%	1/wk, 1/mo	50 m :: Glacier/L	N/A :: Sfc

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy		Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #	Match	Abs :: Rel					
Dozier	Snow Grain Size	3037	HIRIS	AM2	Dozier	3038	BM	200% :: 200%	1/wk, 1/mo	50 m :: Snow/L			
								200% :: 200%	1/wk, 1/mo	50 [km?] :: Snow/L			N/A :: Sfc
Dozier	Snow Liq-water Content	3039	HIRIS	AM2	Dozier	2943	BM	100% :: 100%	1/wk, 1/mo	50 m :: Snow/L			N/A :: Sfc
Grose	Aerosol Conc	1006	HIRDLS	CHEM	Barnett, Gille	1992	AM	20% :: 10%	2/day	15 x 4 dg :: G			2 km :: Strat
Grose	BrO Conc	1026	MLS	MO	Waters	1030	BM	5-10% :: 1-10%	2/day [d.n]	4 x 4 dg :: G			1 km :: 7-30 km
Grose	CFC-11(CFCl3) Conc	1050						20% :: 15%	1/wk	30 x 4 dg :: G			3 km :: Strat
Grose	CFC-12(CF2Cl2) Conc	1042	HIRDLS	CHEM	Barnett, Gille	1055	BM	15% :: 5%	1/mo. [z. mean]	0.1 x 2.5 dg :: 82N-82S			2.5 km :: 15-50 km
Grose	CH3Cl Conc	1065	HIRDLS	CHEM	Barnett, Gille	1047	BM	5-10% :: 1-10%	1/wk	30 x 4 dg :: G			3 km :: Strat
Grose	CH4 Conc	1074	MLS	MO	Waters	1070	BM	15% :: 5%	1/wk	30 x 4 dg :: G			3 km :: Strat
Grose	CO Conc	1116	HIRDLS	CHEM	Barnett, Gille	1085	BM	15% :: 5%	2/day	0.1 x 2.5 dg :: 82N-82S			2.5 km :: TPSE, 40 km
			SAFIRE	MO	Russell	1086	AM	5-10% :: 1-10%	2/day [d.n]	30 x 4 dg :: G			3 km :: Mid-atmos
			TES	CHEM	Beer	1089	AM	7% (15-55km)	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N			1.5 km :: 10-65 km
			TES	CHEM	Beer	1088	AM	40 ppb	1/(16 day)	160 x 23 km :: G			2-3 km :: 4-12 km
			TES	CHEM	Beer	1087	AM	30 ppb	1/(16 day)	160 x 23 km :: G			2-3 km :: 13-30 km
Grose	CO2 Conc	1138	MLS	MO	Waters	1124	BM	15% :: 5%	2/day	30 x 4 dg :: G			3 km :: Mid-atmos
Grose	ClO Conc	1103	MLS	MO	Waters	1125	BM	<=5% :: 1x10-8	2/day [d.n]	0.1 x 2.5 dg :: 82N-82S			2.5 km :: TPSE, 60 km
Grose	Cloud XXX, PSC	3307	GLRS-A	ALT	Spirhorne et al	1405	AM	<=5% :: 1x10-5	2/day [d.n]	0.1 x 2.5 dg :: 82N-82S			2.5 km :: 60-100 km
Grose	H2O Conc	1811	HIRDLS	CHEM	Barnett, Gille	1408	BM	15 ppb	1/(16 day)	160 x 23 km :: G			2-3 km :: 4-12 km
Grose	H2O2 Conc	1166	SAFIRE	MO	Russell	1839	BM	1% :: 0.5%	1/mo	2M :: G			10 km :: Mid-atmos
Grose	HBr Conc	1176	SAFIRE	MO	Russell	1172	BM	20% :: 10%	2/day	16 x 5 km :: L			3 km :: Mid-atmos
Grose	HCl Conc	1182	MLS	MO	Waters	1171	AM	<=5% :: 0.3-3x10-10	2/day [d.n]	30 x 4 dg :: G			3 km :: Mid-atmos
Grose	HF Conc	1193	SAFIRE	MO	Russell	1197	BM	20% :: 10%	2/day	15 x 4 dg :: G			3 km :: Mid-atmos
Grose			SAFIRE	MO	Russell	1188	BM	0.4 km :: 0.4 km	2/day [d.n]	4 x 4 dg :: G			2 km :: Strat
Grose			SAFIRE	MO	Russell	1837	AM	150 m ::	1/(2-16 day)	2-200 km :: Polar			75 m :: Strat
Grose			SAFIRE	MO	Russell	1838	AM	15% :: 5%	2/day	30 x 4 dg :: G			3 km :: Trop/meso
Grose			SAFIRE	MO	Russell	1842	AM	5-10% (20-80 km)	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N			3 km :: 10-100 km
Grose			SAFIRE	MO	Russell	1837	AM	2% <50km	2/day [d.n]	0.1 x 2.5 dg :: 82N-82S			2.5 km [1.2] :: TPSE, 100 km
Grose			SAFIRE	MO	Russell	1837	AM	50 ppm	1/(16 day)	160 x 23 km :: G			2-3 km :: 4-12 km
Grose			SAFIRE	MO	Russell	1837	AM	5-10% :: 1-10%	2/day [d.n]	4 x 4 dg :: G			1 km :: 7-80 km
Grose			SAFIRE	MO	Russell	1172	BM	25% :: 10%	2/day	30 x 10 dg :: G			3 km :: Strat
Grose			SAFIRE	MO	Russell	1171	AM	7% (30-35 km)	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N			3 km :: 20-50 km
Grose			SAFIRE	MO	Russell	1171	AM	1x10-10	1/day [z. mean]	0.1 x 2.5 dg :: 82N-82S			2.5 km :: 30-40 km
Grose			SAFIRE	MO	Russell	1180	BM	25% :: 10%	1/day	30 x 4 dg :: G			3 km :: Strat
Grose			SAFIRE	MO	Russell	1180	BM	10% (25-35 km)	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N			3 km :: 15-40 km
Grose			SAFIRE	MO	Russell	1188	BM	15% :: 10%	1/day	30 x 4 dg :: G			3 km :: Mid-atmos
Grose			SAFIRE	MO	Russell	1188	BM	<=5% :: 0.1-10x10-10	2/day [d.n]	0.1 x 2.5 dg :: 82N-82S			2.5 km :: TPSE, 90 km
Grose			SAFIRE	MO	Russell	1189	BM	<=5% :: 0.1-10x10-10	2/day [d.n]	0.1 x 2.5 dg :: 82N-82S			2.5 km :: TPSE, 80 km
Grose			SAFIRE	MO	Russell	1187	AM	5% (25-55 km)	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N			3 km :: 10-65 km
Grose			SAFIRE	MO	Russell	1187	AM	25% :: 10%	1/day	30 x 4 dg :: G			3 km :: Strat
Grose			SAFIRE	MO	Russell	1197	BM	15% (40-60 km)	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N			3 km :: 40-60 km

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product			EOS Instrument Output Data Product					Accuracy	Temporal	Horizontal	Vertical
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.
Grose	HNO3 Conc	1198	HIRDLS	CHEM	Barnett, Gille	1202	BM	20% :: 5%	2/day	30 x 10 dg :: G	3 km :: Mid-atmos
			MLS	MO	Waters	1203	AM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 10-40 km
			SAFIRE	MO	Russell	1204	AM	<=5% :: 5x10-10	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: TPSE, 46 km
			SAFIRE	MO	Russell	1205	AM	:: 7% (15-40 km)	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	1.5 km :: 10-45 km
			TES	CHEM	Beer	1205	AM	:: 3 ppt	1/(16 day)	160 x 23 km :: G	2.3 km :: 4-12 km
Grose	HO2 Conc	1212	SAFIRE	MO	Russell	1217	BM	25% :: 10%	2/day	30 x 10 dg :: G	3 km :: Mid-atmos
			MLS	MO	Waters	1216	AM	:: 7% (30-60 km)	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N	3 km :: 20-75 km
Grose	HOCl Conc	1218	SAFIRE	MO	Russell	1223	BM	:: 3-20x10-10	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: 30-80 km
			MLS	MO	Waters	1222	AM	20% :: 10%	2/day	30 x 4 dg :: G	3 km :: Strat
Grose	Irradiance, Solar	2271	SAFIRE	MO	Russell	1223	BM	:: 7% (35-40 km)	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N	3 km :: 20-45 km
			MLS	MO	Waters	1222	AM	:: 3x10-11	1/day	0.1 x 2.5 dg :: 82N-82S	2.5 km :: 25-45 km
Grose	N2O Conc	1229	SOLSTICE	MO	Rottman	2278	BM	5% :: 1%	2/day	15 x 4 dg :: G	:: TOA
			HIRDLS	CHEM	Barnett, Gille	1239	BM	<5% :: <1%	1/hr	N/A :: N/A	N/A :: NA
Grose	N2O5 Conc	1250	SAFIRE	MO	Russell	1255	AM	15% :: 5%	1/day	30 x 4 dg :: G	3 km :: Mid-atmos
			SAFIRE	MO	Russell	1239	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-60 km
			SAFIRE	MO	Russell	1241	AM	:: 15% (20-35 km)	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	1.5 km :: 20-40 km
			SAFIRE	MO	Waters	1240	AM	<=5% :: 1-10x10-8	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 65 km
			TES	CHEM	Beer	1243	AM	:: 10 ppt	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km
Grose	NO Conc	1262	HIRDLS	CHEM	Barnett, Gille	1254	BM	20% :: 10%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
			SAFIRE	MO	Russell	1255	AM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 15-45 km
			SAFIRE	MO	Russell	1255	AM	:: 10% (20-40 km)	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	1.5 km :: 10-45 km
			MLS	MO	Waters	1266	BM	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
			TES	CHEM	Beer	1268	AM	:: 1-10x10-7	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: 30-120 km
Grose	NO2 Conc	1269	HIRDLS	CHEM	Barnett, Gille	1273	BM	:: 25 ppt	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km
			MLS	MO	Waters	1274	AM	15% :: 5%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
			SAFIRE	CHEM	Barnett, Gille	1273	BM	5-10% :: 3-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 10-55 km
			SAFIRE	MO	Waters	1274	AM	:: 1-8x10-8	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: 30-60 km
			SAFIRE	MO	Russell	1275	AM	:: 5% (20-55 km)	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	1.5 km :: 15-60 km
Grose	O(3P) Conc	1294	SAFIRE	CHEM	Beer	1278	AM	:: 500 ppt	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km
			SAFIRE	MO	Russell	1298	BM	30% :: 10%	1/hr	30 x 4 dg :: G	3 km :: Mid-atmos
			HIRDLS	MO	Russell	1298	BM	:: 15% (110-180 km)	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N	3 km :: 90-180 km
			MLS	MO	Waters	1318	BM	2% :: 5% :: 2%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
			SAFIRE	CHEM	Barnett, Gille	1318	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-80 km
Grose	O3 Conc	1306	SAFIRE	MO	Waters	1319	AM	<= 3% :: 1% (<50km)	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 110 km
			SAFIRE	MO	Russell	1320	AM	:: 5% (10-70 km)	1/(18-72 s) [?]	25 x 2.5 dg :: 86S-86N	1.5 km :: 10-100 km
			MLS	MO	Waters	1352	AM	20% :: 10%	2/day	30 x 4 dg :: G	3 km :: Strat
			SAFIRE	MO	Waters	1352	AM	:: 3x10-11	1/mo [z. mean]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 25 km
			SAFIRE	MO	Russell	1360	BM	25% :: 10%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
Grose	OH Conc	1355	SAFIRE	MO	Russell	1360	BM	:: 7% (30-75 km)	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N	3 km :: 20-90 km
			HIRDLS	CHEM	Barnett, Gille	1524	BM	0.05 :: 2%	2/day	15 x 4 dg :: G	3 km :: Mid-atmos
			MLS	MO	Waters	1525	AM	0.1% :: 0.1%	2/day [d,n]	4 x 4 dg :: G	0.2 km :: 7-80 km
			SAFIRE	MO	Waters	1525	AM	:: 1% (30-50km)	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 70 km
			SAFIRE	MO	Russell	1526	AM	:: <2% (16-70 km)	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	1.5 km :: 10-110 km
Grose	Temperature Profile	1572	SAFIRE	MO	Russell	1526	AM	2 K :: 0.5 K	2/day	15 x 4 dg :: G	2 km :: Mid-atmos
			HIRDLS	CHEM	Barnett, Gille	1608	BM	1K; 2K>50km :: 0.3K; 1K>50km	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-80 km
			MLS	MO	Waters	1609	AM	:: 2K <100km	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 120 km
			SAFIRE	MO	Russell	1610	AM	:: <0.5K (16-65 km)	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	1.5 km :: 10-110 km
			SAFIRE	MO	Russell	1610	AM				

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product			EOS Instrument Output Data Product				Accuracy			Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #	Match	Abs :: Rel							
Groce	Wind Velocity	1662	MLS	MO	Waters	1734	AM-	5m/s, 10dg :: 5m/s, 5dg :: 10m/s		2/day 2/day (d.n)		15 x 4 dg :: G 0.1 x 2.5 dg :: 82N-82S		2 km :: Mid-atmos 2.5 km [1.2] :: 60-110 km	
Hansen	Aerosol Optical Depth	1001	HIRDLS GLRS-A	CHEM ALT	Barnett, Gille Spinthorne et al	1992 2291	AM AM	tau=0.02 :: 5-10% :: 1-10% 20% ::		1/wk 2/day (d.n) 1/(2-16 day)		500 km :: G 4 x 4 dg :: G 2-200 km :: G		1 km :: Trop N/A :: Atmos	
Hansen	Aerosol Optical Depth	2287	GLRS-A	ALT	Spinthorne et al	2291	AM	tau=0.02 :: 20% ::		1/wk 1/(2-16 day)		500 km :: G 2-200 km :: G		1 km :: Atmos	
Hansen	Albedo, Snow	2017	HIRDLS	CHEM	Barnett, Gille	1992	AM	5-10% :: 1-10%		2/day (d.n)		4 x 4 dg :: G		1 km :: 7-30 km	
Hansen			HIRIS	AM2	Dozier	2440	AM	0.02 :: 5% :: 1%		1/wk, 1/mo		500 km :: Land/L		N/A :: Sfc	
Hansen	CFC-XXX Conc	1037	HIRDLS	CHEM	Barnett, Gille	1047	BM	5-10% :: 1-10%		1/wk		500 km :: G		1 km :: Trop	
Hansen	CH4 Conc	1075	HIRDLS	CHEM	Barnett, Gille	1055	BM	5-10% :: 1-10%		2/day (d.n)		4 x 4 dg :: G		1 km :: 7-30 km	
Hansen			TES	CHEM	Beer	1089	BM	0.10% :: 40 ppb		1/wk		500 km :: Wetlands		2-3 km :: Trop	
Hansen			TES	CHEM	Beer	1087	AM	14 ppb		1/(16 day)		160 x 23 km :: G		4-6 km :: 0-12 km	
Hansen			HIRDLS	CHEM	Barnett, Gille	1085	AM	5-10% :: 1-10%		2/day (d.n)		16 x 5 km :: G 4 x 4 dg :: G		1 km :: 7-65 km	
Hansen	CH4 Conc	1076	TES	CHEM	Beer	1089	BM	40 ppb		1/wk		500 km :: G		2-3 km :: Trop	
Hansen			TES	CHEM	Beer	1087	AM	14 ppb		1/(16 day)		160 x 23 km :: G		4-6 km :: 0-12 km	
Hansen	CO Conc	1117	HIRDLS	CHEM	Barnett, Gille	1085	AM	5-10% :: 1-10%		2/day (d.n)		4 x 4 dg :: G		1 km :: 7-65 km	
Hansen			TES	CHEM	Beer	1129	AM	0.10% :: 3 ppb		1/wk		500 km ::		2-3 km :: Trop	
Hansen			MLS	MO	Waters	1124	AM	<=5% :: 3x10-8		1/(16 day)		16 x 5 km :: G		4-6 km :: 0-12 km	
Hansen			TES	CHEM	Beer	1128	AM	15 ppb		2/day (d.n)		0.1 x 2.5 dg :: 82N-82S 160 x 23 km :: G		2.5 km :: TPSE, 60 km	
Hansen	CO2 Conc	1139	TES	CHEM	Beer	3637	BM	0.2 ppm ::		1/(16 day)		160 x 23 km :: G		2-3 km :: 4-12 km	
Hansen	Cloud Cover	2032	GLRS-A	ALT	Spinthorne	2078	AM	3% :: 1% ::		1/wk		500 km :: G		Cloud	
Hansen	Cloud Height	1399	HIRDLS	CHEM	Barnett, Gille	1531	AM	50 m :: 5-10% :: 5-10%		1/(2-16 day)		10-200 km :: G		N/A ::	
Hansen	H2O Conc, Stratospheric	1864	HIRDLS	CHEM	Barnett, Gille	1531	AM	50 m :: 3% ::		1/wk		500 km :: G		Cloud	
Hansen			TES	CHEM	Beer	1843	BM	0.5 ppm		2/day (d.n)		4 x 4 dg :: G		0.4 km :: Trop	
Hansen			HIRDLS	CHEM	Barnett, Gille	1837	AM	5-10% :: 1-10%		1/(16 day)		500 km :: G		Column :: Strat	
Hansen			MLS	MO	Waters	1838	AM	2% <50km		2/day (d.n)		160 x 23 km :: G		2-3 km :: 13-30 km	
Hansen	Humidity Profile	1812	SAFIRE	MO	Russell	1839	AM	5% (20-80 km)		2/day (d.n)		4 x 4 dg :: G		1 km :: 7-80 km	
Hansen			HIRDLS	CHEM	Barnett, Gille	1837	BM	3% :: 5-10% :: 1-10%		1/(36-72 s) [?]		0.1 x 2.5 dg :: 82N-82S 25 x 2.5 dg :: 86S-86N		2.5 km [1.2] :: TPSE, 100 km	
Hansen			MLS	MO	Waters	1838	AM	2% <50km		1/wk		500 km :: G		3 km :: 10-100 km	
Hansen	Humidity Profile	1813	SAFIRE	MO	Russell	1839	AM	5% (20-80 km)		2/day (d.n)		4 x 4 dg :: G		1 km :: Atmos	
Hansen			TES	CHEM	Beer	1842	AM	3% :: 50 ppm		1/(16 day)		500 km :: G		1 km :: 7-80 km	
Hansen			TES	CHEM	Beer	1844	AM	50 ppm		2/day (d.n)		4 x 4 dg :: 82N-82S		2.5 km [1.2] :: TPSE, 100 km	
Hansen	Industrial Emissions Conc	1372	HIRDLS	CHEM	Barnett, Gille	1085	AM-	2% :: 5-10% :: 1-10%		1/(16 day)		160 x 23 km :: G		2-3 km :: 4-12 km	
Hansen			TES	CHEM	Beer	1256	AM-	300 ppt		1/wk		16 x 5 km :: G 500 km :: G		4-6 km :: 0-12 km	
Hansen			HIRDLS	CHEM	Barnett, Gille	1085	AM-	5-10% :: 1-10%		2/day (d.n)		500 km :: G		1 km :: Trop	
Hansen			TES	CHEM	Beer	1256	AM-	300 ppt		1/(16 day)		160 x 23 km :: G		2-3 km :: 4-12 km	

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product		EOS Instrument Output Data Product			Accuracy		Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #	Match	Abs :: Rel			
Hansen	Irradiance, Solar	2272	ACRIM	MO	Willson	2274	BM	0.05% :: 0.1% :: 0.0005%	1/yrk 1/2 (min)	500 km :: G N/A :: N/A	N/A :: TOA N/A :: TOA
Hansen	N2O Conc	1230	HIRDLS	CHEM	Barnett, Gille	1239	BM	5-10% :: 1-10% 3% ::	2/day (d.n) 1/yrk	4 x 4 dg :: G 500 km :: G	1 km :: 7-60 km :: Atmos
Hansen	O3 Conc	1307	HIRDLS	CHEM	Barnett, Gille	1318	BM	5-10% :: 1-10% <= 3% :: 1% (<50km)	2/day (d.n) 2/day (d.n)	4 x 4 dg :: G 0.1 x 2.5 dg :: 82N-82S	1 km :: 7-80 km 2.5 km [1.2] :: TPSE, 110 km
			MLS	MO	Waters	1319	AM	10% ::	2/day (d.n)	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 70 km
			MLS	MO	Waters	1328	AM	20 ppb	1/16 day	160 x 23 km :: G	2-3 km :: 13-30 km
			TES	CHEM	Beer	1323	AM	3 ppb	1/16 day	160 x 23 km :: G	2-3 km :: 4-12 km
			TES	CHEM	Beer	1324	AM	13 ppb	1/16 day	16 x 5 km :: G	4-6 km :: 0-12 km
			TES	CHEM	Beer	1325	AM	0.02 ::	1/yrk	500 km :: Land :: Sfc	N/A :: Sfc
Hansen	Snow Cover	3009	HIRIS	AM2	Dozier	3019	AM	0.3 C :: 1K:2K>50km :: 0.3K:1K>50km	1/yrk, 1/mo	500 km :: G 500 km :: G	1 km :: 7-80 km :: Strat
Hansen	Temperature Profile	1573	HIRDLS	CHEM	Barnett, Gille	1608	BM	1 K :: 1 K :: 2K <100km	2/day (d.n) 700 rev/day	4 x 4 dg :: G 1-200 km :: G	1 km :: 5-50 km 2.5 km [1.2] :: TPSE, 120 km
			GGI	ALT	Melbourne	1605	AM	5% ::	2/day (d.n)	500 km :: Land 30 m :: Land/L	N/A :: Sfc
			MLS	MO	Waters	1609	AM	10% :: 10% 40% :: 20%	1/2 day	1 dg :: Ocean	N/A :: Near_Sfc
			SAFIRE	MO	Russell	1610	AM	100% :: 50% 20-30% :: 10-15%	2-10 days	0.25-1 km :: Ocean/R	N/A :: TOO
Hansen	Vegetation Type	2731	HIRIS	AM2	Wessman	2644	AM	50% :: 25% 5-10% :: 2-5%	1/2 day [d] 2/day	30-90 m :: Ocean-I/L 5-50 km :: Ocean/R	N/A :: TOO N/A ::
Hansen	Wind Velocity, Sea_sfc	1663	STIKSCAT	CHEM	Freilich	1679	BM	1% :: 20% :: 10%	1/2-16 day	10-200 km :: G	N/A ::
Harris	Chlorophyll_a Conc	3454	HIRIS	AM2	Carder, Melack	2565	AM	10% :: 7%, 16 deg 40% :: 20%	1/2 day	1 dg :: Ocean	N/A :: Sfc
Harris	Chlorophyll_a Conc	3456	HIRIS	AM2	Carder, Davis	2564	AM	100% :: 50% 20-30% :: 10-15%	1/2 day [d] 2-10 days	0.25-1 km :: Ocean-I/L 0.25-1 km :: Ocean/R	N/A :: TOO N/A :: TOO
Harris	Cloud Cover	3436	GLRS-A	ALT	Spinshine	2078	AM	5-10% :: 2-5% 1% ::	2/day	10-200 km :: G	N/A ::
Harris	Gelbstoff Absorption Coef	3453	HIRIS	AM2	Carder, Melack	3215	BM	20% :: 10% 50% :: 25%	2-10 days 1/2 day [d]	0.25-1 km :: Ocean/R 30-90 m :: Ocean-I/L	N/A :: TOO N/A :: TOO
Harris	Level-1B Backscatter Coef, HIRIS	3448	HIRIS	AM2	Carder, Melack	3210	BM	20% :: 10% 50% :: 25%	2-10 days 1/2 day [d]	0.25-1 km :: Ocean/R 30-90 m :: Ocean/R	N/A :: Sfc
Harris	Ocean Productivity, Primary	3460	HIRIS	AM2	Davis, Melack et	2601	AM	30% :: 5% 100% :: 50%	1/day 1(>=2 day)	1-20 km :: Ocean/R 30-90 m :: Ocean/L	N/A :: Sfc N/A :: TOO
Harris	Ocean Wave Height	3431	ALT	ALT	Fu	3129	BM	10-20% :: 5-20% >5m, 10% ::	1-10 days	7-25 km :: Ocean/R	N/A :: Sfc
Harris	Pigment Conc, Accessory	3459	HIRIS	AM2	Davis, Melack	3072	BM	20% :: 10% 100% :: 50%	2-10 days 1(>=2 day)	0.25-1 km :: Ocean/R 60-90 m :: Ocean-I/L	N/A :: Sfc N/A :: TOO
Harris	Sea_Level Height, Along-track	3427	ALT	ALT	Fu	3112	BM	2% :: 1% 10 cm ::	1-10 days	7-25 km :: Ocean/R	N/A :: Sfc
Harris	Sea_sfc Topographic Height	3429	ALT	ALT	Fu	3108	BM	2% :: 1% 5cm et al ::	1-10 days 1/16 day	7-25 km :: Ocean/R	N/A :: Sfc
Harris	Wind Speed, Sea_sfc	3435	ALT	ALT	Fu	1735	BM	5-10% :: 2-10% 2 m/s ::	1-10 days	1-25 km :: Ocean/R	N/A :: Sfc
Harris	Wind Velocity	3433	STIKSCAT	CHEM	Freilich	1680	BM	10%, 20% :: 5%, 10% :: 10%, 16 deg	1 day 1/2 day	25 km :: Ocean	N/A :: Sfc N/A :: Near_Sfc

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product			EOS Instrument Output Data Product				Accuracy		Temporal Resolution	Horizontal		Vertical
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	
Harris	Wind Velocity	3434	STKSCAT	CHEM	Freilich	1679	BM	7%, 14% :: 5%, 10% :: 7%, 16 deg	2 days 1/2 day	100 km :: Ocean/R 1 dg :: Ocean	N/A :: S/c N/A :: Near S/c	
Hartmann	Cloud Drop Size-distribution	1775	HIRIS	AM2	Welch	1776	AM	20% :: 20% 20% :: 10%	1/day 1/2-16 day	10 km :: G 30 m :: L	0-15 km :: Cloud :: Cloud	
Hartmann	Cloud Optical Depth	2306	GLRS-A	ALT	Spinburne	2300	AM	25% :: 0.25 20% ::	1/day 1/2-16 day	10 km :: Ocean 1-100 km :: G	N/A :: Cloud	
Hartmann	Temperature Profile	1575	TES	CHEM	Beer	1614	AM	1 :: 1 :: 2 K 2 m/s :: 2 m/s	1/day 1/day	10 km :: Ocean 16 x 5 km :: G	1 km :: 0-15 km 1 km, 4-6 km :: 0-12 km N/A :: S/c	
Hartmann	Wind Velocity, Sea_sfc	1664	STKSCAT	CHEM	Freilich	1680	BM	10%, 16 deg :: 7%, 16 deg	1/2 day 1/2 day	25 km :: Ocean 1 dg :: Ocean	N/A :: Near S/c N/A :: Near S/c	
Isaacs	Aerosol Layer Boundary Height	1015	STKSCAT	CHEM	Freilich	1679	AM	75 m :: 150 m ::	1/event, 1/mo 1/mission, 1/yr	2 km :: Land/R 2-200 km :: G	75 m :: Atmos 75 m :: Atmos N/A :: S/c	
Isaacs	Drainage_Network Structure	2902	GLRS-A	ALT	Spinburne et al	1014	BM	30% :: 5% :: 2% 5% :: 2%	1/mission, 1/yr	30 m :: L 10-30 m :: Land/L	N/A :: S/c N/A :: S/c	
Isaacs	Glacier Cover	2923	HIRIS	AM2	Kieffer, Clark	2884	AM	1% :: 0.2% 10% :: 0.05 :: 50 ppm	1/yr 1/yr 1/yr	50 m :: Glacier/L 30 m :: Glacier/L 50 km :: Land/R	N/A :: S/c N/A :: S/c 2 km :: Trop 4-6 km :: 0-12 km N/A :: S/c	
Isaacs	Humidity Profile	1815	TES	CHEM	Beer	1844	AM	100 mm :: 100 mm 5m-5m ::	1/yr 1/yr	75 m :: Land/Cryo 15 km :: Land/Cryo	N/A :: S/c N/A :: S/c	
Isaacs	Ice Sheet Elevation	2908	GLRS-A	ALT	Bentley	2912	BM	100-500mm :: 30% ::	1/mission 1/yr, 1/yr	15-30 m :: Land/R 0.1-10 km :: Land	N/A :: S/c 100-500 mm :: S/c N/A :: S/c	
Isaacs	Landform Feature Distribution	2851	GLRS-A	ALT	Schutz et al	2858	BM	10% :: 5% 10% :: 5% 10% :: 5%	1/mission, 1/mo 1/yr	30 m :: Land/L 30 m :: Land/L 30 m :: Land/L	N/A :: S/c N/A :: S/c N/A :: S/c	
Isaacs	Mineral Conc, Rock-Soil	2778	HIRIS	AM2	Kieffer, Clark	2884	BM	5-15% :: 1-10%	1/yr	10-50 km :: Land/R	Column :: Atmos N/A :: Atmos N/A :: S/c N/A :: S/c	
Isaacs	Optical Depth, Total	2326	GLRS-A	ALT	Spinburne et al	2291	AM	20% :: 5% :: 2% 5% :: 2%	1/2-16 day	2-200 km :: G 15-30 m :: Land/L	N/A :: Atmos N/A :: S/c N/A :: S/c	
Isaacs	River Channel Patterns	2982	HIRIS	AM2	Kieffer, Clark	2884	AM	30 m :: L		30 m :: L	N/A :: S/c	
Isaacs	Snow Cover	3011	HIRIS	AM2	Dozier	3019	BM	1 :: 0.4 :: 2 K 40% :: 15%	1/yr, 1/mo 1/yr	50 km :: Land/R 16 x 5 km :: G	1 km :: Trop 1 km, 4-6 km :: 0-12 km N/A :: S/c	
Isaacs	Temperature Profile	1576	TES	CHEM	Beer	1614	AM	30% :: 15% 30% :: 15%	1/mo 1/2-16 day	30 m :: Land/L 240-500 m :: Land/R	N/A :: S/c N/A :: S/c	
Isaacs	Vegetation Biomass, Green	2617	HIRIS	AM2	Ustin, Weasman	2620	BM	1 :: 1 20% :: 10%	1/mo 1/2-16 day	30 m :: Land/L 30 m :: Land/L	N/A :: S/c N/A :: S/c	
Isaacs	Vegetation Index	2743	HIRIS	AM2	Ustin et al	2746	AM	1 :: 0.5 20% :: 10%	1/mo 1/2-16 day	30-60 m :: Land/L 30 m :: Land/L	N/A :: S/c N/A :: S/c	
Isaacs	Vegetation Index	2744	HIRIS	AM2	Ustin et al	2746	AM	5% :: 5% 5-10% :: 1-10%	1/2-16 day	30 m :: Land/L 25 km :: Land	N/A :: S/c 3 km :: Atmos 1 km :: 7-30 km	
Kerr, Sorooshian	Aerosol Conc	1007	HIRDLS	CHEM	Barnett, Gille	1992	AM		1/day 2/day [d.n.]			

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product		EOS Instrument Output Data Product			Accuracy		Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	Vertical
Kerr, Sorooshian	Albedo, Cloud	2006	HIRIS	AM2	Welch	2008	AM	5% :: 5%	1/hr	500 m :: Land/R	500 m :: R	Cloud
Kerr, Sorooshian	CO2 Conc	1140	TES	CHEM	Beer	3637	BM	15% :: 15%	1/day	50 km :: G	50 km :: G	1 km :: Atmos
Kerr, Sorooshian	Cloud Cover	2075	GLRS-A	ALT	Spinburne	2078	AM	5% :: 5%	1/(16 day)	10 km :: Land/R	10 km :: Land/R	N/A :: Cloud
Kerr, Sorooshian	Cloud Height, Base	1385	GLRS-A	ALT	Spinburne et al	1389	BM	1% :: 1%	1/(2-16 day)	10-200 km :: G	10-200 km :: G	N/A :: Cloud
Kerr, Sorooshian	Cloud Height, Top	1417	GLRS-A	ALT	Spinburne et al	1425	AM	1% :: 0.5%	1/(1-3 min)	30 m :: L	30 m :: L	Cloud
Kerr, Sorooshian	Cloud Liq. water Content	1905	HIRIS	AM2	Welch	1390	AM	200m :: 200m	1/hr	1 km :: Land	1 km :: Land	100 mb :: Trop
Kerr, Sorooshian	Land, sfc Reflectance, Directional	2428	HIRIS	AM2	Slater	2432	BM	75 m :: 75 m	1/(2-16 day)	2-100 km :: G	2-100 km :: G	75 m :: Cloud
Kerr, Sorooshian	Pressure	1518	HIRDLS	CHEM	Barnett, Gille	1524	BM	500 m :: 250 m	1/(2-16 day)	30 m :: L	30 m :: L	N/A :: Cloud
Kerr, Sorooshian	Soil Mineral Type	2802	HIRIS	AM2	Rowan, Clark	2772	AM	30% :: 10%	1/hr	90 m :: R	90 m :: R	Cloud
Kerr, Sorooshian	Soil Reflectance, Bi-directional, (BRDF)	2042	HIRIS	AM2	Rowan, Clark	2784	AM	3% :: 5%	1/(2 mo)	30 m :: Land/R	30 m :: Land/R	Sfc
Kerr, Sorooshian	Structure-Location, Significant Mappable	2882	HIRIS	AM2	Kieffer, Clark	2884	BM	3% :: 1%	1/mo	30 m :: Land/R	30 m :: Land/R	N/A :: Sfc
Kerr, Sorooshian	Temperature Profile	1577	HIRDLS	CHEM	Barnett, Gille	1608	AM	5% :: 5%	1/(16 day)	30 m :: Land/L	30 m :: Land/L	N/A :: Sfc
Kerr, Sorooshian	Vegetation Biome Area	2630	HIRIS	AM2	Westman	2644	AM	5% :: 10%	1/(2-16 day)	30 m :: Land/L	30 m :: Land/L	N/A :: Sfc
Kerr, Sorooshian	Vegetation Density	2634	HIRIS	AM2	Westman	2741	AM	20% :: 10%	1/(2-16 day)	30 m :: Land/L	30 m :: Land/L	N/A :: Sfc
Kerr, Sorooshian	Vegetation Height	2636	HIRIS	AM2	Westman	2741	BM	20% :: 10%	1/(2-16 day)	30 m :: Land/L	30 m :: Land/L	N/A :: Sfc
Kerr, Sorooshian	Vegetation Reflectance, Bi-directional, (BRDF)	2046	HIRIS	AM2	Westman	2657	AM	40% :: 20%	1/(2-16 day)	30 m :: Land/L	30 m :: Land/L	N/A :: Sfc
Kerr, Sorooshian	Vegetation Spatial Density	2638	HIRIS	AM2	Westman	2657	BM	10% :: 10%	1/(2-16 day)	30 m :: Land/L	30 m :: Land/L	N/A :: Sfc
Kerr, Sorooshian	Vegetation Type	2733	HIRIS	AM2	Westman	2644	BM	10% :: 10%	1/(2-16 day)	30 m :: Land/L	30 m :: Land/L	N/A :: Sfc
Lau	Albedo, Snow	2018	HIRIS	AM2	Dozier	2440	BM	20% :: 10%	1/wk, 1/mo	100 m :: Land/R	100 m :: Land/R	N/A :: Sfc

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product			EOS Instrument Output Data Product				Accuracy			Temporal Resolution		Horizontal Resol :: Cover.		Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #	Match	Abs :: Rel							
Lau	Cloud Cover	2054	GLRS-A	ALT	Spinlime	2078	AM	5% :: 5%		2/day		50 km :: R		N/A :: Atmos	
								1% ::		1/(2-16 day)		10-200 km :: G		N/A ::	
Lau	Cloud Cover, Cirrus	2070	GLRS-A	ALT	Spinlime	1410	AM	5% :: 5%		1/day		100 km :: G		N/A ::	
								0.2 ::		1/(2-16 day)		1-10 km :: G		75 m ::	
								75 m ::		1/(2-16 day)		2-10 km :: G		75 m ::	
Lau	Cloud Height, Cirrus	1402	GLRS-A	ALT	Spinlime	2078	AM	1% ::		1/(2-16 day)		10-200 km :: G		N/A ::	
								100 m ::		2/day		50 km :: G		N/A :: Atmos	
Lau	Drainage Basin Boundary	2904	GLRS-A	ALT	Spinlime	1410	AM	0.2 ::		1/(2-16 day)		1-10 km :: G		75 m ::	
								75 m ::		1/(2-16 day)		2-10 km :: G		75 m ::	
Lau	River Channel Geometry, Major stream	3049	HIRIS	AM2	Kieffer, Clark	2884	AM-	100m ² :: 100m ²		1/mission		10 m :: Land/L		N/A :: S/c	
								:: 30%				30 m :: L		N/A :: S/c	
Lau	River Channel Geometry, Major stream	3049	HIRIS	AM2	Kieffer, Clark	2884	AM	10 :: 10		1/mission		30 m :: Land/R		N/A :: S/c	
								:: 30%				30 m :: L		N/A :: S/c	
Lau	Snow Cover	3012	HIRIS	AM2	Dozier	3019	BM	50 :: 10		1/wk		100 m :: Land/L		N/A :: S/c	
								5% :: 2%		1/wk, 1/mo		50 m :: Cryo/L		N/A :: S/c	
Lau	Vegetation Type	2734	HIRIS	AM2	Westman	2644	BM	10% :: 10%		1/dec		30 m :: Land/L		N/A :: S/c	
								20% :: 10%		1/(2-16 day)		30 m :: Land/L		N/A :: S/c	
Lau	Wind Speed	1739	STIKSCAT	CHEM	Freilich	1679	AM	0.5 m/s :: 2%		2/day		100 km :: G		N/A :: S/c	
								:: 7%, 16 deg		1/(2 day)		1 dg :: Ocean		N/A :: Near S/c	
Lau	Wind Stress	1743	STIKSCAT	CHEM	Freilich	1746	BM	0.01 ::				:: Ocean		N/A :: S/c	
												:: Ocean		S/c	
Liu	Cloud Cover	2055	GLRS-A	ALT	Spinlime	2078	AM	1% ::		1/(2-16 day)		10-200 km :: G		N/A :: Cloud	
								3 cm :: 3 cm				:: Ocean		N/A :: S/c	
Liu	Topographic Elevation, Sea_gfc	3123	ALT	ALT	Fu	3108	BM	5cm et al ::		1/(16 day)		25 km :: Ocean		N/A :: S/c	
								10 cm ::				7 km :: Ocean		N/A :: S/c	
Liu	Wind Direction	1702	STIKSCAT	CHEM	Freilich	1680	BM	10 dg :: 10 dg		1/day		25 km :: Ocean		N/A :: S/c	
								:: 10%, 16 deg		1/(2 day)		25 km :: Ocean		N/A :: Near S/c	
Liu	Wind Speed, Sea_gfc	1713	STIKSCAT	CHEM	Freilich	1680	BM	I :: I		1/day		25 km :: Ocean		N/A :: S/c	
Moore	Aerosol Conc	1008	HIRIS	AM2	Gerstl	2292	AM-	1% :: 10%		1/(2 day)		25 km :: Ocean		N/A :: Near S/c	
								50% ::		1/(2 day)		1 km :: G		N/A :: S/c	
Moore	Aerosol Conc	1009	HIRIS	AM2	Gerstl	2292	AM-	0.05 :: 0.01		1/(2-16 day)		100 m :: L		Column :: Atmos	
								50% ::		1/(2 day)		30 m :: L		Column :: Atmos	
Moore	CO Conc	1118	MLS	MO	Waters	1124	AM	0.05 :: 0.01		1/(2-16 day)		100 m :: L		Column :: Atmos	
								25% :: 10%		1/day		100 km :: G		:: Trop	
Moore	Cloud Cover	2057	HIRIS	AM2	Welch	2079	AM	<=5% :: 3x10-8		2/day [d.n]		0.1 x 2.5 dg :: 82N-82S		2.5 km :: TPSE, 60 km	
								10% :: 10%		1/wk		1 km :: G		:: Cloud	
Moore	O3 Conc	1309	HIRIS	AM2	Welch	2079	AM	1% :: 0.5%		1/(1-3 min), 1/(2-16 day)		30 m :: L		:: Atmos	
								25% :: 10%		1/day		100 km :: G		:: Atmos	
Moore	PAR	2328	HIRIS	AM2	Ustin, Westman	2030	BM	5-10% :: 1-10%		2/day [d.n]		4 x 4 dg :: G		1 km :: 7-80 km	
								:: 3 ppb		1/(16 day)		160 x 23 km :: G		2-3 km :: 4-12 km	
Moore	Pigment Conc, Non-photosynthetic	2695	HIRIS	AM2	Ustin, Westman	2030	BM	20% :: 10%		1/day, 1/wk		30 m :: Land/L		4-6 km :: 0-12 km	
								25% :: 10%		1/(2-16 day)		30 m :: Land/L		N/A :: S/c	
								20% :: 20%		1/(16 day)		1 km :: Land/R		:: S/c	
								40% :: 20%		1/(2-16 day)		30 m :: Land/L		N/A :: S/c	

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product		EOS Instrument Output Data Product				Accuracy		Temporal		Horizontal		Vertical	
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.	Resol :: Cover.
Mouginis-Mark	Lava-Flow Advance Rate	3262	HIRIS	AM2	Rowan, Goetz	3294	AM	10 C :: 5 C	1/2-16 day	30 m :: Land/L	30 m :: Land/L	N/A :: S/c	N/A :: S/c
Mouginis-Mark	Lava-Flow Areal Change	3266	HIRIS	AM2	Rowan, Goetz	3299	AM	(30m) ² ::	2/day [d,n]	30 m :: Land/L	30 m :: Land/L	N/A :: S/c	N/A :: S/c
Mouginis-Mark	Lava-Flow Temperature	3292	HIRIS	AM2	Rowan, Goetz	3294	AM	10 C :: 5 C	1/2-16 day	30 m :: Land/L	30 m :: Land/L	N/A :: S/c	N/A :: S/c
Mouginis-Mark	Temperature, PBL	3302	HIRIS	AM2	Rowan, Goetz	3294	AM	10 C ::	2/day [d,n]	30 m :: Land/L	30 m :: Land/L	N/A :: S/c	N/A :: S/c
Mouginis-Mark	Volcano Deformation	3269	GLRS-A	ALT	Spinthorne et al	1514	BM	150 m ::	1/day	30 m :: Land/R	30 m :: Land/R	N/A :: Plume col	N/A :: Plume col
Mouginis-Mark	Volcano Elevation Change	3274	GLRS-A	ALT	Schutz et al	3271	BM	1 cm/ver ::	1/day	cm [7] :: 30 km ² /10	1 km :: Land/L	75 m :: Trop	75 m :: Trop
Mouginis-Mark	Volcano Elevation Change	3278	GLRS-A	ALT	Schutz et al	3271	BM	5/yr-100/d ::	1/day, 1/yr	1 km :: Land/L	1 km :: Land/L	N/A :: S/c	N/A :: S/c
Mouginis-Mark	Volcano Morphology	3284	GLRS-A	ALT	Schutz et al	2831	AM	1-5 (ver) ::	2/day [d,n]	30 m :: Land/L	30 m :: Land/L	N/A :: S/c	N/A :: S/c
Mouginis-Mark	Volcano Temperature, Eruption Spike	3290	GLRS-A	ALT	Cohen, Schutz et al	2831	BM	5 m/yr ::	1/yr	100-900 km :: Land/R	100-900 km :: Land/R	N/A :: S/c	N/A :: S/c
Mouginis-Mark	Volcano Temperature-Change	3295	GLRS-A	ALT	Schutz et al	2831	AM	100-500mm ::	1/yr	0.1-10 km :: Land	0.1-10 km :: Land	N/A :: S/c	N/A :: S/c
Mouginis-Mark	Aerosol Extinction Coef	2327	GLRS-A	ALT	Cohen, Schutz et al	2831	AM	5 m/yr ::	1/yr	100-900 km :: Land/R	100-900 km :: Land/R	N/A :: S/c	N/A :: S/c
Mouginis-Mark	Cloud Cover	2058	GLRS-A	ALT	Spinthorne	2078	AM	10 C ::	1/2-16 day	1 km :: G	1 km :: G	N/A :: S/c	N/A :: S/c
Mouginis-Mark	Cloud Height, Top	1418	GLRS-A	ALT	Spinthorne	2078	AM	10 C :: 5 C	1/2-16 day	30 m :: Land/L	30 m :: Land/L	N/A :: S/c	N/A :: S/c
Mouginis-Mark	O3 Conc	1310	GLRS-A	ALT	Spinthorne	2078	AM	10 C :: 5 C	1/2-16 day	30 m :: Land/L	30 m :: Land/L	N/A :: S/c	N/A :: S/c
Mouginis-Mark	Topographic Elevation, Sea_sfc	3122	GLRS-A	ALT	Spinthorne	2078	AM	10 C :: 5 C	1/2-16 day	30 m :: Land/L	30 m :: Land/L	N/A :: S/c	N/A :: S/c
Mouginis-Mark	Trace Gas Conc	1374	GLRS-A	ALT	Spinthorne	2078	AM	10 C :: 5 C	1/2-16 day	30 m :: Land/L	30 m :: Land/L	N/A :: S/c	N/A :: S/c
Mouginis-Mark	Wind Stress	1744	GLRS-A	ALT	Spinthorne	2078	AM	10 C :: 5 C	1/2-16 day	30 m :: Land/L	30 m :: Land/L	N/A :: S/c	N/A :: S/c

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product		EOS Instrument Output Data Product			Accuracy		Temporal Resolution	Horizontal		Vertical
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #		Resol :: Cover.	Resol :: Cover.	
Pyle	HNO _x Conc	1210	HIRDLS	CHEM	Barnett, Gille	1202	BM	25% :: 10% 5-10% :: 1-10%	15 x 4 km :: G 4 x 4 dg :: G	3 km :: Strat 1 km :: 10-40 km
Pyle	HO ₂ Conc	1213	MLS	MO	Waters	1216	BM	25% :: 10% :: 3-20x10-10	15 x 4 km :: G 0.1 x 2.5 dg :: 82N-82S	3 km :: Strat 2.5 km :: 30-80 km
Pyle	HOCl Conc	1219	SAFIRE	MO	Russell	1217	AM	:: 7% (30-60 km) 25% :: 10%	1/106-72 s [?] 2day	3 km :: 20-75 km 3 km :: Strat
Pyle	Irradiance, Solar	2273	MLS	MO	Waters	1222	BM	:: 3x10-11	1day	3 km :: Strat
Pyle	N ₂ O Conc	1231	SAFIRE	MO	Russell	1223	AM	:: 7% (35-40 km) :: 1%	1/106-72 s [?] 2day	2.5 km :: 25-45 km 3 km :: 20-45 km 3 km :: Strat
Pyle	N ₂ O ₃ Conc	1251	SOLSTICE	MO	Rotman	2278	BM	<5% :: <1% <5% :: <1%	1hr	N/A :: NA N/A :: NA
Pyle	NO Conc	1263	SOLSTICE	MO	Rotman	2277	BM	15% :: 5% <5% :: 1-10x10-8 5-10% :: 1-10%	2day 2day [d,n]	3 km :: Strat 2.5 km [1.2] :: TPSE, 65 km 1 km :: 7-60 km
Pyle	NO ₂ Conc	1270	HIRDLS	CHEM	Barnett, Gille	1239	BM	20% :: 10% 5-10% :: 1-10%	2day 2day [d,n]	3 km :: Strat 1 km :: 15-45 km 1.5-3 km :: 10-45 km
Pyle	O(3P) Conc	1295	HIRDLS	CHEM	Barnett, Gille	1254	BM	15% :: 5% :: 1-10x10-7	2day 2day [d,n]	3 km :: Strat 2.5 km [1.2] :: 30-120 km 2-3 km :: 13-30 km
Pyle	O ₃ Conc	1311	SAFIRE	MO	Russell	1255	AM	15% :: 5% :: 25 ppt	2day 1/16 day	3 km :: Strat 1 km :: 10-55 km 2.5 km [1.2] :: 30-60 km 1.5 km :: 15-60 km
Pyle	OCIO Conc	1350	TES	CHEM	Beer	1278	AM	15% :: 5% :: 500 ppt	1/16 day 1/16 day	2-3 km :: 4-12 km 2 km :: Strat
Pyle	OH Conc	1581	SAFIRE	MO	Russell	1298	BM	15% :: 5% :: 15% (110-180 km)	1/16 day 1/16 day	3 km :: 90-180 km 3 km :: Strat
Pyle	Temperature Profile	1714	HIRDLS	CHEM	Barnett, Gille	1318	BM	5% :: 2% 5-10% :: 1-10%	2day 2day [d,n]	1 km :: 7-80 km 2.5 km [1.2] :: TPSE, 110 km 1.5-3 km :: 10-100 km
Pyle	Wind Speed	2654	MLS	MO	Waters	1319	BM	<= 3% :: 1% (<50km) :: 5% (10-70 km)	2day [d,n]	2-3 km :: 13-30 km 2-3 km :: 4-12 km 3 km :: Strat
Richey, Batista	Lake Water Chlorophyll Conc		SAFIRE	MO	Russell	1320	AM	25% :: 10% :: 3x10-11	1/16 day 1/16 day	2.5 km [1.2] :: TPSE, 25 km 2 km :: Strat
			SAFIRE	MO	Russell	1360	BM	20% :: 10% :: 7% (30-75 km)	2day 1/16 day	2 km :: 20-90 km 3 km :: 20-90 km
			TES	CHEM	Beer	1614	AM	2 K :: 0.5 K :: 2 K	1/16 day	1 km, 4-6 km :: G 1 km, 4-6 km :: G
			TES	CHEM	Beer	1615	AM	2 K :: 2 K	1/16 day	2-3 km :: 13-30 km 2.5 km [1.2] :: TPSE, 120 km
			MLS	MO	Waters	1609	AM	2 K <100km :: <0.5K (16-65 km)	2day [d,n]	1.5 km :: 10-110 km 2 km :: Strat
			SAFIRE	MO	Russell	1610	AM	5 m/s :: 5 m/s	2day	2.5 km [1.2] :: 60-110 km N/A :: TOO
			MLS	MO	Waters	1734	BM	100% :: 50%	2day [d,n]	N/A :: TOO
			HIRIS	AM2	Carter, Melack	3314	AM-		10-90 m :: Ocean/Land/Lakes (>=2)/day	N/A :: TOO

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product			EOS Instrument Output Data Product					Accuracy	Temporal Resolution	Horizontal	Vertical
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #	Match	Abs :: Rel		Resol :: Cover.	Resol :: Cover.
Schoeberl	CH3Cl Conc	1067	MLS	MO	Waters	1070	BM	15% :: 20 :: 1x10-11	1/wk 2/day [d,n]	8 x 10 dg :: G 0.1 x 2.5 dg :: 82N-82S	3 km :: Strat 2.5 km :: TPSE, 40 km
Schoeberl	CH4 Conc	1078	HIRDLS	CHEM	Barnett, Gille	1065	BM	15% :: 0.05 5-10% :: 1-10% :: 7% (15-55km)	1/day 2/day [d,n] 1/(18-72 s) [?]	2 x 3 dg :: G 4 x 4 dg :: G 25 x 1-5 dg :: 86S-86N	1.5 km :: Strat 1 km :: 7-65 km 1.5 km :: 10-65 km
Schoeberl	CO Conc	1120	TES	CHEM	Beer	1088	AM	30 ppb 15% :: 5	1/(16 day) 1/day	160 x 23 km :: G 2 x 3 dg :: G	2-3 km :: 13-30 km 2 km :: Trop
Schoeberl	CO Conc	1121	TES	CHEM	Beer	1128	AM	15 ppb 3 ppb	1/(16 day) 1/(16 day)	160 x 23 km :: G 16 x 5 km :: G	2-3 km :: 4-12 km 4-6 km :: 0-12 km
Schoeberl	CO Conc	1121	MLS	MO	Waters	1124	BM	15% :: 5 <=5% :: 3x10-8	1/day 2/day [d,n]	8 x 10 dg :: G 0.1 x 2.5 dg :: 82N-82S	3 km :: Mid-atmos 2.5 km :: TPSE, 60 km
Schoeberl	CO Conc	1121	MLS	MO	Waters	1125	BM	<=5% :: 1x10-5	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: 60-100 km
Schoeberl	CO Conc	1127	TES	CHEM	Beer	1127	AM	10 ppb 10% :: 0.02	1/(16 day) 1/day	160 x 23 km :: G 8 x 10 dg :: G	2-3 km :: 13-30 km 3 km :: Strat
Schoeberl	CIO Conc	1105	MLS	MO	Waters	1107	BM	<=5% :: 0.3-3x10-10 10% :: 10%	2/day [d,n] 1/day	0.1 x 2.5 dg :: 82N-82S 8 x 10 dg :: G	2.5 km :: TPSE, 70 km 3 km :: Strat
Schoeberl	H2O (HDO) Conc	1856	SAFIRE	MO	Russell	1857	BM	7% (20-50 km) 10% :: 5% 0.05s	1/(36-72 s) [?] 1/day	25 x 2.5-5 dg :: 86S-86N 2 x 3 dg :: G	3 km :: 10-60 km 1.5 km :: 0-Strat
Schoeberl	H2O Conc	1821	HIRDLS	CHEM	Barnett, Gille	1837	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-80 km
Schoeberl	H2O Conc	1838	MLS	MO	Waters	1838	BM	2% <50km	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 100 km
Schoeberl	H2O Conc	1839	SAFIRE	MO	Russell	1839	AM	5% (20-80 km)	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N	3 km :: 10-100 km
Schoeberl	H2O Conc	1843	TES	CHEM	Beer	1843	AM	0.5 ppm	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km
Schoeberl	H2O Conc	1844	TES	CHEM	Beer	1844	AM	50 ppm	1/(16 day)	16 x 5 km :: G	4-6 km :: 0-12 km
Schoeberl	H2O Conc	1822	HIRDLS	CHEM	Barnett, Gille	1837	BM	10% :: 0.05 5-10% :: 1-10%	1/day 2/day [d,n]	4 x 5 dg :: G 4 x 4 dg :: G	2.5 km :: Mezo 1 km :: 7-80 km
Schoeberl	H2O Conc	1838	MLS	MO	Waters	1838	AM	2% <50km	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 100 km
Schoeberl	H2O Conc	1839	SAFIRE	MO	Russell	1839	AM	5% (20-80 km)	1/(36-72 s) [?]	25 x 2.5-5 dg :: 86S-86N	3 km :: 10-100 km
Schoeberl	H2O3 Conc	1168	MLS	MO	Waters	1171	BM	20% :: 1-10% :: 1x10-10	1/wk 1/day [z, mean]	8 x 10 dg :: G 0.1 x 2.5 dg :: 82N-82S	2 km :: Strat 2.5 km :: 30-40 km
Schoeberl	HBr Conc	1178	SAFIRE	MO	Russell	1172	AM	7% (30-35 km)	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N	3 km :: 20-50 km
Schoeberl	HCN Conc	1190	SAFIRE	MO	Russell	1180	BM	20% :: 1 10% (25-35 km)	1/wk 1/(36-72 s) [?]	8 x 10 dg :: G 25 x 2.5-5 dg :: 86S-86N	2 km :: Strat 3 km :: 15-40 km
Schoeberl	HCN Conc	1190	MLS	MO	Waters	1191	BM	20% :: 0.01 <=5% :: 4x10-11	1/wk 2/day [d,n]	8 x 10 dg :: G 0.1 x 2.5 dg :: 82N-82S	3 km :: Strat 2.5 km :: 20-65 km
Schoeberl	HCl Conc	1184	SAFIRE	MO	Russell	1192	AM	35% (25-30 km)	1/(36-72 s) [?]	25 x 2.5 dg :: 86S-86N	3 km :: 25-35 km
Schoeberl	HCl Conc	1188	MLS	MO	Waters	1188	BM	15% :: 0.1 <=5% :: 0.1-10x10-10	1/day	4 x 5 dg :: G 0.1 x 2.5 dg :: 82N-82S	2 km :: Strat 2.5 km :: TPSE, 90 km
Schoeberl	HCl Conc	1189	MLS	MO	Waters	1189	BM	<=5% :: 0.1-10x10-10	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: TPSE, 80 km
Schoeberl	HF Conc	1195	SAFIRE	MO	Russell	1187	AM	5% (25-35 km)	1/(36-72 s) [?]	25 x 2.5-5 dg :: 86S-86N	3 km :: 10-65 km
Schoeberl	HF Conc	1197	SAFIRE	MO	Russell	1197	BM	15% :: 0.05 15% (40-60 km)	1/day 1/(36-72 s) [?]	4 x 5 dg :: G 25 x 2.5-5 dg :: 86S-86N	2 km :: Strat 3 km :: 40-60 km
Schoeberl	HNO3 Conc	1200	HIRDLS	CHEM	Barnett, Gille	1202	BM	15% :: 0.1 5-10% :: 1-10%	1/day 2/day [d,n]	2 x 3 dg :: G 4 x 4 dg :: G	2 km :: Strat 1 km :: 10-40 km
Schoeberl	HNO3 Conc	1203	MLS	MO	Waters	1203	AM	<=5% :: 5x10-10	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km :: TPSE, 46 km
Schoeberl	HNO3 Conc	1204	SAFIRE	MO	Russell	1204	AM	7% (15-40 km)	1/(18-72 s) [?]	25 x 1-5 dg :: 86S-86N	1.5 km :: 10-45 km
Schoeberl	HNO3 Conc	1206	TES	CHEM	Beer	1206	AM	3 ppt 1/(16 day)	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product			EOS Instrument Output Data Product					Accuracy	Temporal Resolution	Horizontal	Vertical
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #	Match	Abs :: Rel		Resol :: Cover.	Resol :: Cover.
Schoeberl	HO2 Conc	1214	MLS	MO	Waters	1216	BM	15% :: 0.02	1/day [d]	6 x 8 dg :: G	2 km :: Strat
			SAFIRE	MO	Russell	1217	AM	3-20x10-10 :: 7% (30-60 km) 20% :: 0.02	2/day [d,n] 1/(36-72 s) [?] 1/wk	0.1 x 2.5 dg :: 82N-82S 25 x 2.5-5 dg :: 86S-86N 8 x 10 dg :: G	2.5 km :: 30-80 km 3 km :: 20-75 km 3 km :: Strat
			MLS	MO	Waters	1222	BM	3x10-11	1/day	0.1 x 2.5 dg :: 82N-82S	2.5 km :: 25-45 km
Schoeberl	HOCl Conc	1220	SAFIRE	MO	Russell	1223	AM	7% (35-40 km) 15% :: 10	1/(36-72 s) [?] 1/day	25 x 2.5-5 dg :: 86S-86N 2 x 3 dg :: G	3 km :: 20-45 km 2 km :: Strat
			HIRDLS	CHEM	Barnett, Gilie	1239	BM	5-10% :: 1-10% 5-10% :: 1-10% <=5% :: 1-10x10-8	2/day [d,n] 2/day [d,n]	4 x 4 dg :: G 0.1 x 2.5 dg :: 82N-82S	1 km :: 7-60 km 2.5 km [1.2] :: TPSE, 65 km
			SAFIRE	MO	Russell	1241	AM	15% (20-35 km) :: 10 ppt	1/(18-72 s) [?] 1/(16 day)	25 x 1.5 dg :: 86S-86N 160 x 23 km :: G	1.5 km :: 20-40 km 2-3 km :: 13-30 km
Schoeberl	N2O Conc	1252	TES	CHEM	Beer	1243	AM	15% :: 20%	1/day	8 x 10 dg :: G	3 km :: Strat
			HIRDLS	CHEM	Barnett, Gilie	1254	BM	5-10% :: 1-10%	2/day [d,n]	4 x 4 dg :: G	1 km :: 15-45 km
			SAFIRE	MO	Russell	1255	AM	10% (20-40 km)	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	1.5-3 km :: 10-45 km
Schoeberl	NO Conc	1264	MLS	MO	Waters	1266	BM	15% :: 2x10m :: 1-10x10-7	1/day [d]	4 x 5 dg :: G	2 km :: Mid-atmos
			TES	CHEM	Beer	1268	AM	25 ppt 10% ::	2/day [d,n] 1/(16 day)	160 x 23 km :: G 4 x 5 dg :: G	2-3 km :: 13-30 km 2 km :: Mid-atmos
			HIRDLS	CHEM	Barnett, Gilie	1273	BM	5-10% :: 3-10% :: 1-8x10-8	2/day [d,n] 2/day [d,n]	4 x 4 dg :: G 0.1 x 2.5 dg :: 82N-82S	1 km :: 10-55 km 2.5 km [1.2] :: 30-60 km
Schoeberl	NO2 Conc	1271	MLS	MO	Waters	1274	AM	5% (20-55 km) :: 500 ppt	1/(18-72 s) [?] 1/(16 day)	25 x 1.5 dg :: 86S-86N 160 x 23 km :: G	1.5 km :: 15-60 km 2-3 km :: 4-12 km
			SAFIRE	MO	Russell	1275	AM	15% :: 10%	1/(16 day)	8 x 10 dg :: G	3 km :: Strat
			TES	CHEM	Beer	1278	AM	15% (110-180 km) 10% :: 10%	1/(36-72 s) [?] 1/day	25 x 2.5-5 dg :: 86S-86N 4 x 5 dg :: G	3 km :: 90-180 km 2.5 km :: Trop
Schoeberl	O3 Conc	1312	HIRDLS	CHEM	Barnett, Gilie	1318	BM	5-10% :: 1-10% :: 5% (10-70 km)	2/day [d,n] 1/(18-72 s) [?]	4 x 4 dg :: G 25 x 2.5-5 dg :: 86S-86N	1 km :: 7-80 km 1.5-3 km :: 10-100 km
			SAFIRE	MO	Russell	1320	AM	3 ppt :: 13 ppt	1/(16 day) 1/(16 day)	160 x 23 km :: G 16 x 5 km :: G	2-3 km :: 4-12 km 4-6 km :: 0-12 km
			TES	CHEM	Beer	1325	AM	10% :: 5%	1/day	2 x 3 dg :: G	1.5 km :: Mid-atmos
Schoeberl	O3 Conc	1313	HIRDLS	CHEM	Barnett, Gilie	1318	BM	5-10% :: 1-10% <= 3% :: 1%(<50km)	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-80 km
			MLS	MO	Waters	1319	BM	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 110 km	2.5 km [1.2] :: TPSE, 110 km
			SAFIRE	MO	Russell	1320	AM	25 x 2.5-5 dg :: 86S-86N 160 x 23 km :: G	1/(18-72 s) [?] 1/(16 day)	25 x 2.5-5 dg :: 86S-86N 160 x 23 km :: G	1.5-3 km :: 10-100 km 2-3 km :: 13-30 km
Schoeberl	O3 Conc	1313	TES	CHEM	Beer	1324	AM	15% (20-30 km) :: 10%	1/(36-72 s) [?] 2/day [d,n]	25 x 2.5-5 dg :: 86S-86N 0.1 x 2.5 dg :: 82N-82S	3 km :: 20-35 km 2.5 km [1.2] :: TPSE, 70 km
			SAFIRE	MO	Russell	1328	AM	10% (20-40 km) :: 50%	1/(36-72 s) [?] 2/day [d,n]	25 x 2.5-5 dg :: 86S-86N 0.1 x 2.5 dg :: 82N-82S	3 km :: 20-50 km 2.5 km [1.2] :: 20-60 km
			MLS	MO	Waters	1326	AM	10% :: 10%	2/day [d,n]	8 x 10 dg :: G	5 km :: Strat
Schoeberl	O3(18'000) Conc	1342	MLS	MO	Waters	1343	BM	20%	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: 20-60 km
			SAFIRE	MO	Russell	1344	AM	15% (20-30 km) :: 15% (20-35 km)	1/(36-72 s) [?] 1/(36-72 s) [?]	25 x 2.5-5 dg :: 86S-86N 25 x 2.5-5 dg :: 86S-86N	3 km :: 20-35 km 3 km :: 20-40 km
			SAFIRE	MO	Russell	1345	AM	15% (20-35 km) 20% :: 0.01	1/(36-72 s) [?] 1/wk [n]	25 x 2.5-5 dg :: 86S-86N 8 x 10 dg :: G	3 km :: 20-40 km 3 km :: Strat
Schoeberl	OC10 Conc	1351	MLS	MO	Waters	1352	AM	3x10-11 :: 3x10-11	1/mo. [z, mean]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 25 km
			SAFIRE	MO	Russell	1360	BM	10% :: 02x, 05m :: 7% (30-75 km)	1/day [d]	6 x 8 dg :: G 25 x 2.5-5 dg :: 86S-86N	2 km :: Mid-atmos 3 km :: 20-90 km
			SAFIRE	MO	Russell	1360	BM	7% (30-75 km)	1/(36-72 s) [?]	25 x 2.5-5 dg :: 86S-86N	3 km :: 20-90 km

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product			EOS Instrument Output Data Product				Accuracy	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.	
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #	Match	Abs :: Rel			
Schoberl	Radiation Intensity, UV	2411	SOLSTICE	MO	Rottman	2278	BM	5% :: 2%	1/day	:: G	N/A :: Strat
			SOLSTICE	MO	Rottman	2277	AM	<5% :: <1%	1/hr	N/A :: N/A	N/A :: NA
								<5% :: <1%	1/hr	N/A :: N/A	N/A :: NA
Schoberl	SO2 Conc	1366	MLS	MO	Waters	1369	BM	20% ::	1/wk	8 x 10 dg :: G	3 km :: Strat
			TES	CHEM	Beer	1370	AM	:: 5x10-10	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 30 km
								:: 600 ppt	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km
Schoberl	Temperature Profile	1582						2 K :: 1 K	1/day	2 x 2 dg :: G	2 km :: Atmos
			HIRDLS	CHEM	Barnett, Gille	1608	BM	1K; 2K>50km :: 0.3K; 1K>50km	2/day [d,n]	4 x 4 dg :: G	1 km :: 7-80 km
			GGI	ALT	Melbourne	1605	AM	1 K :: 1 K	700 rel/day	1-200 km :: G	1 km :: 5 - 50 km
			MLS	MO	Waters	1609	AM	:: 2K (<100km)	2/day [d,n]	0.1 x 2.5 dg :: 82N-82S	2.5 km [1.2] :: TPSE, 120 km
			SAFIRE	MO	Russell	1610	AM	:: <0.5K(16-65 km)	1/(18-72 s) [?]	25 x 1.5 dg :: 86S-86N	1.5 km :: 10-110 km
			TES	CHEM	Beer	1614	AM	:: 2 K	1/(16 day)	16 x 5 km :: G	1 km, 4-6 km :: 0-12 km
			TES	CHEM	Beer	1615	AM	:: 2 K	1/(16 day)	160 x 23 km :: G	2-3 km :: 13-30 km
			TES	CHEM	Beer	1616	AM	:: 2 K	1/(16 day)	160 x 23 km :: G	2-3 km :: 4-12 km
								::			
Sellers	Aerosol Optical Depth	2288	GLRS-A	ALT	Spinhirne et al	2291	AM	20% ::	1/(2-16 day)	2-200 km :: G	N/A :: Atmos
			HIRIS	AM2	Gerstl	2292	AM	0.05 :: 0.01	1/(2-16 day)	100 m :: L	Column :: Atmos
Sellers	Aerosol XXX	1004	GLRS-A	ALT	Spinhirne et al	1014	AM	150 m ::	1/(2-16 day)	2-200 km :: G	75 m :: Atmos
Sellers	Albedo, Cloud	2007									
			HIRIS	AM2	Welch	2008	BM	5% :: 5%		90 m :: R	:: Cloud
Sellers	CO2 Conc	1141									
			TES	CHEM	Beer	3637	BM		1/(16 day)	16 x 5 km :: L	
Sellers	Land_sfc Reflectance, Bi-directional Spectral, (BRD)	2041	HIRIS	AM2	Gerstl	2035	BM	5% :: 5%	1/(16 day)	250-500 m :: Land	N/A :: Sfc
			HIRIS	AM2	Slater	2432	AM	3% :: 1%	1/mo	30 m :: Land/L	N/A :: Sfc
Sellers	PBL Height	1513	GLRS-A	ALT	Spinhirne et al	1514	BM	150 m ::	1/(2-16 day)	2-200 km :: G	75 m :: Trop
Sellers	Vegetation Biomass	2628	HIRIS	AM2	Ustin, Westman	2620	BM	30% :: 15%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc
			HIRIS	AM2	Ustin, Westman	2614	BM	30% :: 15%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc
									1/(1-4 day)	100 km ::	:: Sfc
Sellers	Vegetation Cover	2740	HIRIS	AM2	Ustin, Westman	2741	AM	20% :: 10%	1/(2-16 day)	30 m :: Land/L	N/A :: Sfc
								2% ::		:: Canada/R	N/A :: Sfc
Simard	Albedo, Snow	2019	HIRIS	AM2	Dozier	2440	AM	5% :: 1%	1/wk, 1/mo	50 m :: Land/L	N/A :: Sfc
								5% ::		:: Canada/R	N/A :: Cloud
Simard	Cloud Cover	2056	GLRS-A	ALT	Spinhirne	2078	AM	1% ::	1/(2-16 day)	10-200 km :: G	N/A ::
									1/yr, 1/season	:: Canada/R	N/A :: Sfc
Simard	Glacier Displacement	2894	HIRIS	AM2	Kieffer	2895	BM	1% :: 0.2%	1/yr	30 m :: Glacier/L	N/A :: Sfc
Simard	Ice_Sheet Displacement	2896	GLRS-A	ALT	Bentley	2897	BM	10 mm/day :: 10 mm/day	1/mo	N/A :: Land/Cryo	N/A :: Sfc
			HIRIS	AM2	Kieffer	2932	AM	10^-6 :: variable	1/yr	100 m :: Cryo	N/A :: Sfc
								10 cm ::	1/yr, 1/season	:: Canada/R	N/A :: Sfc
Simard	Ice_Sheet Elevation	2909	GLRS-A	ALT	Bentley	2912	BM	100 mm ::	1/(3 mo)	10 km :: Land/R	N/A :: Sfc
			ALT	ALT	Zwally	2911	AM	100 mm :: 100 mm	1/mo	75 m :: Land/Cryo	N/A :: Sfc
								5m-5m ::	1/yr	15 km :: Land/Cryo	N/A :: Sfc
Simard	Ice_Sheet Elevation	2910						100 mm ::	1/(3 mo)	100 km :: Land	N/A :: Sfc
			ALT	ALT	Zwally	2911	BM	5m-5m ::	1/yr	15 km :: Land/Cryo	N/A :: Sfc

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product		EOS Instrument Output Data Product			Accuracy		Temporal Resolution	Horizontal		Vertical
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #		Resol :: Cover.	Resol :: Cover.	
Simard	Ice_Sheet Thickness	3055	GLRS-A	ALT	Bentley	2912	BM-	100 mm ::	10 km :: Land/R	N/A :: Sfc
			ALT	ALT	Zwally	2911	BM-	100 mm :: 100 mm 5m-5m ::	75 m :: Land/Cryo 15 km :: Land/Cryo	N/A :: Sfc
Simard	Ice_Sheet Thickness	3056	GLRS-A	ALT	Bentley	2912	BM-	100 mm ::	100 km :: Land	N/A :: Sfc
			ALT	ALT	Zwally	2911	BM-	100 mm :: 100 mm 5m-5m ::	75 m :: Land/Cryo 15 km :: Land/Cryo	N/A :: Sfc
Simard	Snow State	3043	HIRIS	AM2	Dozier	3019	BM	5% :: 2%	50 m :: Cryo/L	N/A :: Sfc
			HIRIS	AM2	Dozier	3029	BM	5% :: 2%	50 m :: Glacier/L	N/A :: Sfc
Simard	Vegetation Extent	2720	HIRIS	AM2	Dozier	3038	AM	200% :: 200%	50 [km?] :: Snow/L	N/A :: Sfc
			HIRIS	AM2	Dozier	2943	AM	100% :: 100%	50 m :: Snow/L	N/A :: Sfc
Srokosz	Level-1B Backscatter Coef, ALT	2096	HIRIS	AM2	Ustin, Westman	2741	AM	10% ::	30 m :: Land/L	N/A :: Sfc
			ALT	ALT	Fu	3464	BM	20% :: 10% 0.2 dB :: 0.1 dB	10 km :: Ocean [South Atlan]	N/A :: Sfc
Srokosz	Level-1B Backscatter Coef, STIKSCAT	2109	STIKSCAT	CHEM	Freilich	2108	BM	0.3 dB :: 0.1 dB :: 0.25 dB	25 km :: Ocean [South Atlan]	N/A :: Sfc
			ALT	ALT	Fu	3464	BM	0.02 (bw) :: 0.1 dB	10 km :: Ocean [South Atlan]	N/A :: Sfc
Srokosz	Ocean Wave Height, Significant	3131	ALT	ALT	Fu	3129	BM	> (5m, 5%) :: 0.1 m	10 km :: Ocean/R	N/A :: Sfc
			ALT	ALT	Fu	3129	BM	> 5m, 10% ::	7 km :: Ocean	N/A :: Sfc
Srokosz	Temperature Profile	1584	TES	CHEM	Beer	1614	AM	1 K :: 0.1 K	10 km :: Ocean [South Atlan]	1 km, 4-6 km :: 0-12 km
			ALT	ALT	Fu	3108	BM	0.02 m :: 0.01 m	10 km :: Ocean/R	N/A :: Sfc
Srokosz	Topographic Elevation, Sea_gfc	3107	ALT	ALT	Fu	3108	BM	5cm et al ::	25 km :: Ocean	N/A :: Sfc
			STIKSCAT	CHEM	Freilich	1680	BM	10 dg :: 1 dg	25 km :: Ocean [South Atlan]	N/A :: Near_Sfc
Srokosz	Wind Direction	1703	STIKSCAT	CHEM	Freilich	1680	BM	10% :: 16 deg	25 km :: Ocean	N/A :: Sfc
			STIKSCAT	CHEM	Freilich	1680	BM	1 m/s :: 0.1 m/s	25 km :: Ocean [South Atlan]	N/A :: Sfc
Srokosz	Wind Speed, Sea_gfc	1716	STIKSCAT	CHEM	Freilich	1680	BM	5% :: 5 dg :: 0.1 m/s, 1 dg	25 km :: Ocean [South Atlan]	N/A :: Sfc
			STIKSCAT	CHEM	Freilich	1679	AM	10% :: 16 deg	25 km :: Ocean	N/A :: Near_Sfc
Tapley	Humidity Profile	1825	TES	CHEM	Beer	1842	AM	5% ::	1 dg :: Ocean	1 km :: Atmos
			STIKSCAT	CHEM	Freilich	1746	BM	50 ppm	50 km :: Ocean	2-3 km :: 4-12 km
Wielicki	Aerosol Optical Depth	2289	GLRS-A	ALT	Spinborne	2300	AM	10% ::	100 km :: Ocean	N/A :: Sfc
			GLRS-A	ALT	Spinborne	2300	AM	0.10 :: 0.10	125 dg :: G	N/A :: Atmos
Wielicki	Cloud Cover	2077	HIRIS	AM2	Welch	2079	BM	2% :: 2%	30 m :: R	N/A :: Atmos
			HIRIS	AM2	Welch	1762	AM	1% :: 0.5%	30 m :: L	N/A :: Cloud
Wielicki	Cloud Drop Phase	1760	HIRIS	AM2	Welch	1762	AM	25% :: 10%	0.3-10 km :: R	N/A :: Atmos
			HIRIS	AM2	Welch	1776	AM	25% :: 10%	0.3-10 km :: L	N/A :: Cloud
Wielicki	Cloud Drop Size	1771	HIRIS	AM2	Welch	1776	AM	20% :: 10%	0.3-10 km :: R	N/A :: Atmos
			HIRIS	AM2	Welch	1778	AM	10 um ::	30 m :: L	N/A :: Cloud
Wielicki	Cloud Height, Base	1387	GLRS-A	ALT	Spinborne et al	1389	AM	0.1 km :: 0.1 km	0.2 km :: R	0.1 km :: Atmos
			HIRIS	AM2	Welch	1390	AM	75 m ::	2-100 km :: G	75 m :: Cloud
								50 m :: 50 m	30 m :: L	N/A :: Cloud

Appendix N: IDS Input Requirements Not Met until Year 2001

IDS Input Data Product			EOS Instrument Output Data Product					Accuracy	Temporal	Horizontal	Vertical
Investigator	Product Name	Prod #	Instr.	Platform	Investigator	Prod #	Match	Abs :: Rel	Resolution	Resol :: Cover.	Resol :: Cover.
Wielicki	Cloud Height, Top	1421	GLRS-A	ALT	Spinthorne et al	1425	AM	0.1 km :: 0.1 km	1/(16 day)	0.2 km :: R	0.1 km :: Atmos
			HIRIS	AM2	Welch, Goetz	1426	AM	75 m :: 500 m :: 250 m	1/(2-16 day)	200 m :: G	75 m :: Cloud
			HIRIS	AM2	Welch	2037	AM	5% :: 2% :: 1%	1/day	0.2-2 km :: R	N/A :: Cloud
Wielicki	Cloud Reflectance, Bi-directional, (BRDF)	2423	HIRIS	AM2	Welch	2037	AM			30 m :: R	:: Cloud

**IDS Input Requirements
Not Met at All by
EOS Instruments**

Appendix O

Science Processing Support Office (SPSO)

Goddard Space Flight Center

August 1992

Appendix O: IDS Input Requirements Not Met at All by EOS Instruments

Investigator	IDS Input Data Product Name	Prod #	Accuracy Abs :: Real	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Abbott	Ocean Productivity, Primary, Near sfc	2598		1/(1-2 day)	1-4 km :: Ocean [Southern]	N/A :: Near_sfc
Abbott	Wind Velocity	1754	10%, <20dg :: 5%	1/(1-2 day)	25 km :: Ocean [Southern]	1 km :: Trop
Barron	Erosion Rock Weathering	2807		1/mission	10 km :: Land/R	N/A :: Sfc
Barron	Erosion Rock Weathering	2808		1/mission	100 km :: Land	N/A :: Sfc
Barron	Radiative Flux, LW	2186	10 :: 5	1/day	30 m :: L	N/A :: Sfc
Barron	Radiative Flux, SW	2236	10 :: 5	1/day	30 m :: L	N/A :: Sfc
Barron	River Channel Geometry	2888	10% :: 10%	1/seas	1 m :: Land/L	N/A :: Sfc
Barron	River Extent	3063	10% :: 10%	1/day	30 m :: Land/L	N/A :: Sfc
Barron	River Extent	3064	10% :: 10%	1/day	10 km :: Land/R	N/A :: Sfc
Barron	Snow Water Equivalent	2998	10% :: 10%	1/day	10 km :: Land/R	N/A :: Sfc
Barron	Snow Water Equivalent	2999	10% :: 10%	1/day	30 m :: Land/L	N/A :: Sfc
Barron	Soil Moisture	2948	0.05 :: 0.02	1/day	30 m :: Land/L	N/A :: Sfc
Barron	Suspended-Solids Conc, River Water	2805	25% ::		10 km :: Land/R-Rivers	N/A :: Sfc
Barron	Vegetation Moisture, Root-zone	2950	0.1 :: 0.05	1/day	100 km :: Land	N/A :: Sub_sfc
Barron	Vegetation Moisture, Root-zone	2951	0.1 :: 0.05	1/day	10 km :: Land/R	N/A :: Sfc
Barron	Vegetation Moisture, Root-zone	2952	0.1 :: 0.05	1/day	30 m :: Land/L	N/A :: Sub_sfc
Barron	Wind Velocity	1650	1 m/s :: 0.5 m/s	1/day	30 m :: L	1 km :: 0-12 km
Barron	Wind Velocity	1651	1 m/s :: 0.5 m/s	1/day	10 km :: R	1 km :: 0-12 km
Barron	Wind Velocity	1652	1 m/s :: 0.5 m/s	1/day	100 km :: L	1 km :: 0-12 km
Barron	Wind Velocity, Land_sfc	1654	1 :: 1	1/day	100 km :: Land	N/A :: Sfc
Barron	Wind Velocity, Land_sfc	1655	1 :: 1	1/day	30 m :: Land/L	N/A :: Sfc
Barron	Wind Velocity, Land_sfc	1656	1 :: 1	1/day	10 km :: Land/R	N/A :: Sfc
Bates	Angular Momentum	1378	1% ::		:: G	:: Atmos
Bates	Cloud Radiative Forcing	2421		1/wk	500 km :: G	:: Atmos
Bates	Heat Flux, Latent	1464	10 :: 10	1/day	100 km :: Ocean	N/A :: Sfc
Bates	Heat Flux, Latent	1465	:: 20%	1/(3 day)	100 km :: >60 dgLAT	
Bates	Heat Flux, Sensible	1476	:: 20%	1/day	100 km :: > 60 dgLAT	
Bates	Heating, Latent	1463			25 km :: G	10 lvl :: Trop
Bates	Ocean Water Salinity	3080		1/(3 day)	100 km :: > 60 dgLAT	:: TOO
Bates	Ocean Water Temperature, Internal	3115		1/(3 day)	100 km :: > 60 dgLAT	:: lvl [?]
Bates	Ocean Wave Power Spectrum, 2-D	3463			:: Ocean	N/A :: Sfc
Bates	Precipitation Conc, Ice	1949			10 km :: G	7 lvl :: Trop
Bates	Precipitation Rate, Rain	1954			10 km :: G	7 lvl :: Trop
Bates	Precipitation Drop Phase, Sfc	1966			10 km :: G	N/A :: Sfc
Bates	Sea_Ice Roughness	1555	100 mm ::	1/(3 mo)	:: Polar	N/A :: Sfc
Bates	Soil Moisture	2959	10-25% :: 5-10%	1/(3 day), 1/wk	60-100 m :: Land	N/A :: Sfc
Bates	Torque, Friction	1640	5% ::		:: G	:: Atmos
Bates	Wind Velocity	1659	:: <2 m/s	1/(12 min)	3.1 x 1.8 dg :: G	3 km :: 38-60 km
Bates	Wind Velocity	1660	:: <5 m/s	1/(12 min)	1.8 x 3.1 dg :: G	3 km :: 20-38 km
Bates	Wind Velocity	1661	1-5 m/s ::	2/day	100 km :: G	1 km :: Atmos
Bates	Wind Velocity	2382				
Bates	Wind Velocity, LAWS Line-of-sight (Level-1B)					
Brewer	Heat Flux, Latent	1467		1/day, 1/seas	:: Ocean	N/A :: Sfc
Brewer	Heat Flux, Sensible	1477		1/day, 1/seas	:: Ocean	N/A :: Sfc
Brewer	Ocean Water Attenuation Coef, Diffuse	3201	25% :: TBD	1/day, 1/seas	30 m :: Ocean/L	N/A :: Sfc

Appendix O: IDS Input Requirements Not Met at All by EOS Instruments

Investigator	IDS Input Data Product Name	Prod #	Accuracy Abs :: Real	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Cihlar	Level-1B Backscatter Coef, SAR_EOS	2102	2 dB :: 1 dB	1/(3 mo)	25 m :: Canada/R	N/A :: Sfc
Cihlar	Sea_sfc Reflectance Factor, MODIS-T	2438	0.05 :: 0.001	1/(3 mo)	0.5 km :: Canada/R	
Cihlar	Soil Hydraulic Properties	3492	5-10% :: 5%	once	1 km :: Canada/R	N/A :: Sfc
Cihlar	Vegetation Moisture, Root-zone	3501	10% :: 20%	1 wk (in grow. seas)	1 km :: Canada/R	N/A :: Sub_sfc
Dickinson	Electric Conductivity	3419			<0.5-1 deg :: G	
Dickinson	Electric Field Strength, DC	3420			<0.5-1 deg :: G	
Dickinson	Heat Flux, Latent	3327			<0.5-1 deg :: Ocean	
Dickinson	Heat Flux, Sensible	3328			<0.5-1 deg :: Ocean	
Dickinson	Heating, Diabatic,	3326			<0.5-1 deg :: G	
Dickinson	Moisture Flux, Horizontal,	3356			<0.5-1 deg :: G	N/A : Trop
Dickinson	Precipitation Rate, Snow	3360			<0.5-1 deg :: G	
Dickinson	Radiation Budget	3385			<0.5-1 deg :: G	
Dickinson	Sea_Ice Thickness	3418			<0.5-1 deg :: Ocean/Cryo	
Dickinson	Snow Depth	3414			Med_res :: Land	
Dickinson	Soil Moisture	3413			High_res :: Land	
Dickinson	Vegetation Moisture, Root-zone	3399			<0.5-1 deg :: Land	
Dickinson	Vegetation Rooting Depth	3403			<0.5-1 deg :: Land	
Dickinson	Vegetation Water Potential	3407			<0.5-1 deg :: Land	
Dickinson	Wind Speed, Land_sfc	3339			Low_res :: Land	
Dickinson	Wind Velocity	3335			<0.5-1 deg :: Land	
Dickinson	Wind Velocity, Divergent Horizontal	3336			<0.5-1 deg :: G	
Dickinson	Wind Velocity, Rotational Horizontal	3337			<0.5-1 deg :: G	
Dickinson	X-Ray Images	3421			<0.5-1 deg :: G	
Dozier	Heat Flux, Sfc	2131	10% :: 10%	1/wk	50 m :: Land/L	N/A :: Sfc
Dozier	Snow Water Equivalent	3000	20% :: 20%	1/wk, 1/mo	50 m :: Land/L	N/A :: Sfc
Grose	ClONO2 Conc	1108	20% :: 10%	2/day	30 x 4 dg :: G	3 km :: Strat
Grose	HNO4 Conc	1207	50% :: 10%	2/day	30 x 4 dg :: G	3 km :: Mid-atmos
Hansen	CO2 Partial Pressure	3075	2% ::	1/wk	500 km :: Ocean	:: TOO
Hansen	Ocean Water Salinity	3079	0.02% ::	1/wk	500 km :: Ocean	:: TOO
Hansen	Ocean Water Temperature, Internal	3116		1/wk	500 km :: Ocean	:: Sub_sfc
Harris	Ocean Wave Direction	3430	10 :: 10	1/day	10 deg :: Ocean/R	
Harris	Ocean Wave Length	3432	10% :: 10%	1/day	1-10 km :: Ocean/R	
Harris	Sea_sfc Feature position	3425	120 m :: 60 m	1 wk	0.25-1 km :: Ocean/R	
Harris	Sea_sfc Feature velocity	3426	20% :: 10%	1 wk	0.25-1 km :: Ocean/R	
Hartmann	Wind Velocity	1665	4 m/s :: 4 m/s	1/day	100 km :: G	:: 0-15 km
Isacks	Geodetic Site Position, Horizontal	2863	3 mm :: 1 mm	1/seas, 1/yr	point :: Land/R	N/A :: Sfc
Isacks	Geodetic Site Position, Vertical	2865	5 mm :: 2 mm	1/seas, 1/yr	point :: Land/R	N/A :: Sfc
Isacks	Pressure, Sfc	1517			:: Land/R	N/A :: Sfc
Isacks	Sand Depth	2780	0.5 :: 0.5	1/seas	50 m :: Land/L	N/A :: Sfc
Isacks	Snow Depth	3031	20% :: 20%	1/seas	30 m :: Land/L	N/A :: Sfc
Isacks	Soil Moisture	2963	10% :: 5%	1/mo, 1/yr	60-100 m :: Land/L	N/A :: Sfc
Isacks	Topographic Elevation, Land_sfc	2844	0.1 :: 0.1	1/mission, 1/seas	1 m :: Land/L	N/A :: Sfc
Isacks	Wind Velocity	1666	:: 0.4	1/wk	100 km :: Land/R	:: Trop
Kerr, Sorooshian	Humidity, Relative, Near_sfc	1881	10% :: 10%	1/hr	1 km :: Land/R	N/A :: Sfc

Appendix O: IDS Input Requirements Not Met at All by EOS Instruments

Investigator	IDS Input Data Product Name	Prod #	Accuracy Abs :: Real	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Kerr, Sorooshian	Infiltration Capacity	2936		1/yr	30 m :: Land/R	
Kerr, Sorooshian	Land Heat Capacity	2855			30 m :: Land/R	N/A :: Sfc
Kerr, Sorooshian	Precipitation Amount, Rain, Monthly	1957	10% :: 10%	1/mo	500 m :: Land/L	N/A :: Sfc
Kerr, Sorooshian	Radiative Flux, LW, Up	2192	15% :: 15%	[diurnal]	500 m :: Land/R	:: TOA
Kerr, Sorooshian	Soil Bulk Density	2791	5% :: 5%	1/yr	1 km :: Land	N/A :: Sfc
Kerr, Sorooshian	Soil Hydraulic Conditions, Unsaturated	2917	0.05 ::	1/(1-3 yr) [few yr]	30 m :: Land/R	:: Sfc
Kerr, Sorooshian	Vegetation Biomass, Sub_sfc	2624			1120 m :: Land/R	:: Sub_sfc
Kerr, Sorooshian	Vegetation Rooting Depth	2707	20% :: 20%	1/yr	30 m :: Land/R	
Kerr, Sorooshian	Vegetation Stomatal Resistance	2709		1/seas	30 m :: Land/R	
Kerr, Sorooshian	Vegetation Water Content, Integrated	2758	20% :: 20%	2/wk	500 m :: Land/R	N/A :: Sfc
Kerr, Sorooshian	Wind Flux(Draw)	1706		1/day	25 km :: Land	10 km :: Trop
Kerr, Sorooshian	Wind Speed, Land_sfc	1711	5 m/s :: 5 m/s	1/hr	25 km :: Land/R	N/A :: Sfc
Lau	Heat Flux, Latent	1468	10% :: 10%	1/hr	30 m :: Land/L	N/A :: Sfc
Lau	Heat Flux, Sensible	1479	10% :: 10%	1/hr	30 m :: Land/L	N/A :: Sfc
Lau	Heating Rate, Latent	1501	0.5 C/day :: 5%	1/mo	500 km :: G	2 km :: Trop
Lau	Heating Rate, Latent	1502	1 C/day :: 5%	1/day	50 km :: R	1 km :: Trop
Lau	Inundation Extent	2938	10% :: 5%	1/wk	100 m :: Land/L	N/A :: Sfc
Lau	Ocean Water Salinity	3081	10% :: 10%	1/wk	500 km :: Ocean/Trop	
Lau	Ocean Water Temperature, Internal	3218	0.5 K ::	1/day	10 km :: Ocean/R	10 m :: Sub_sfc
Lau	Precipitation Depth	2981	10% :: 10%	1/day	1 km :: Land/R	N/A :: Sfc
Lau	Precipitation Rate	1960	25% :: 10%	1/hr	100 m :: Land/L	N/A :: Sfc
Lau	Precipitation Storm Depth (Precip-thickness)	1965	10% :: 10%	1/hr	100 m :: Land/L	N/A :: Sfc
Lau	Pressure, Sfc	1533	5% ::	1/day	100 km :: G	N/A :: Sfc
Lau	River Floodplain Extent	2914	10% :: 5%	1/wk	100 m :: Land/L	N/A :: Sfc
Lau	Runoff	2985	5% :: 5%	1/day	:: Land/L,R	N/A :: Sfc
Lau	Snow Depth	3032	5 cm :: 5 cm	1/wk	5 km :: Land/R	N/A :: Sfc
Lau	Snow Depth	3033	5 cm :: 5 cm	1/wk	30 m :: Land/R	N/A :: Sfc
Lau	Snow Water Equivalent	2996	10 mm :: 10 mm	1/wk	30 m :: Land/L	N/A :: Sfc
Lau	Snow Water Equivalent	2997	10 mm :: 10 mm	1/wk	5 km :: Land/R	N/A :: Sfc
Lau	Soil Moisture	2964	10% :: 5%	1/(3 day)	50 m :: Land/L	N/A :: Sfc
Lau	Wind Speed	1712	1 m/s :: 2%	2/day	100 km :: G	1 km :: Trop
Lau	Wind Speed, PBL	1738	20% :: 10%	1/hr	30 m :: Land/L	N/A :: PBL
Liu	Wind Velocity	1667	1 :: 1	1/day	25 km :: Ocean	:: Trop
Moore	Inundation Extent	2939	20% :: 20%	1/wk, 1/mo	1-25 km :: Land	:: Sfc
Moore	Inundation Extent	2942	20% :: 20%	1/wk	1-25 km :: Land	
Moore	Precipitation Amount, Snow	1983	10% :: 10%	1/wk	1 km :: G	
Moore	River Discharge	2889	5% :: 5%	1/wk, 1/mo	few sites :: Land	:: Sfc
Moore	River Stage (Flooding)	2984		1/wk, 1/mo	point :: Land	:: Sfc
Moore	Snow Water Equivalent	3046		1/wk	1 km :: Land	:: Sfc
Moore	Vegetation N Conc	2688	20% :: 20%	1/(16 day)	1 km :: Land/R	
Moore	Vegetation N Conc	2689	20% :: 20%	1/(16 day)	30 m :: Land/L	
Mouginis-Mark	Lava-Flow Thickness	3297	5 cm(ver) ::	1/event	30 m :: Land/L	N/A :: Sfc
Murakami	Aerosol Backscatter	2105	10-50% ::			
Murakami	Heat Flux, Net	1475	5% ::			

Appendix O: IDS Input Requirements Not Met at All by EOS Instruments

Investigator	IDS Input Data Product Name	Prod #	Accuracy Abs :: Real	Temporal Resolution	Horizontal Resol :: Cover.	Vertical Resol :: Cover.
Murakami	Snow Mass	3040	10% ::		:: Land	N/A :: Sfc
Murakami	Wind Velocity	1668	10% :: TBD			
Pyle	BrONO2 Conc	1031	25% :: 10%	2/day	15 x 4 km :: G	3 km :: Strat
Pyle	CH3Br Conc	1061	25% :: 10%	2/day	15 x 4 km :: G	3 km :: Strat
Pyle	ClONO2 Conc	1109	25% :: 10%	2/day	15 x 4 km :: G	3 km :: Strat
Richey, Batista	Lake Water Chemistry, XXX	2812	[10%], 5% :: [5%], 10%	1/wk	1 km :: Land/R	N/A :: Sfc
Richey, Batista	River Floodplain Extent	2913	10% :: 10%	1/seas	1 km :: Land/R	N/A :: Sfc
Richey, Batista	River Stage (Flooding)	2983	5 cm :: 5%	1/seas	100 m :: Land/R	N/A :: Sfc
Richey, Batista	River Water Attenuation Coef	3205	10% :: 10%	1/wk	1 km :: Land/R	N/A :: TOO
Richey, Batista	River Water Chemistry	2809	[10%], 5% :: [5%], 10%	1/wk	1 km :: Land/R	N/A :: Sfc
Richey, Batista	River Water Chlorophyll Conc	2655	20% :: 10%	1/wk	1 km :: Land/R	N/A :: TOO
Richey, Batista	Vegetation Moisture, Root-zone	2708	[20%], 10% :: [10%], 20%	1/seas	1 km :: Land/R	N/A :: Sfc
Richey, Batista	Ocean Water Salinity, Sub ice	3083	0.02 o/oo :: 0.02 o/oo	1/(3 day)	500 km :: Polar	N/A :: TOO
Rothrock	Ocean Water Temperature, Internal	3117	0.02 K :: 0.02 K	1/(3 day)	500 km :: Polar	-vl ::
Rothrock	Pressure, Sfc	1519	1 mb :: 1 mb	1/day	500 km :: Polar	N/A :: Sfc
Rothrock	Sea_Ice Temperature	2490	2 K :: 2 K	1/(3 day)	25 km :: Polar	N/A :: Sfc
Schimel	Vegetation N Conc	2690	20% :: 1%	1/seas	30 m :: 6 sites/L	N/A :: Sfc
Schimel	Vegetation N Conc	2691	20% :: 1%	[multiple]	[multiple] :: 6 sites/L	N/A :: Sfc
Schoeberl	C2H6 Conc	1037	20% :: 0.2	1/wk	8 x 10 dg :: G	3 km :: Strat
Schoeberl	CH3Br Conc	1062	20% :: 2	1/wk	8 x 10 dg :: G	3 km :: Strat
Schoeberl	ClONO2 Conc	1110	15% :: 0.05	1/day	8 x 10 dg :: G	3 km :: Strat
Schoeberl	DMS Conc	1158	20% :: 0.1	1/wk	8 x 10 dg :: G	3 km :: Trop
Schoeberl	Electron Energy Spectra	3226	20% :: 15%	1/day	5 dgLAT :: G	N/A :: 50-700 km
Schoeberl	HNO4 Conc	1208	20% :: 0.02	1/wk	8 x 10 dg :: G	3 km :: Strat
Schoeberl	OCS Conc	1354	20% :: 0.1	1/wk	8 x 10 dg :: G	3 km :: Strat
Schoeberl	PAN Conc	1365	20% :: 0.01	1/day	8 x 10 dg :: G	3 km :: Strat
Schoeberl	Proton Energy Spectra	3255	20% :: 15%	1/day	5 dgLAT :: G	N/A :: 50-700 km
Schoeberl	Wind Velocity	1671	2 m/s :: 3 m/s	1/day	200 x 200 km :: G	2 km :: Strat
Schoeberl	X-Ray Energy Spectra	3258	20% :: 15%	1/day	5 dgLAT :: G	N/A :: 15-110 km
Sellers	Level-1B Radiance, MODIS-T	3485				
Sellers	Wind Speed	1715	1 m/s ::	4/day	100 km ::	0.5 km :: Trop
Simard	Snow Depth	3034	5 cm/10% ::	1/(7 day)	10 km :: Canada/R	N/A :: Sfc
Simard	Snow Water Equivalent	3045	10 mm/10% ::	1/(7 day)	10 km :: Canada/R	N/A :: Sfc
Simard	Soil Hydraulic Properties	2916	10% ::		:: Canada/R	N/A :: Sfc
Simard	Vegetation Moisture, Root-zone	2953	10% ::		:: Canada/R	N/A :: Sfc
Stokosz	Level-1B Backscatter, SAR	2106	0.2 dB :: TBD	[occasional]	25 m :: Ocean [South Atlan]	N/A :: Sfc
Stokosz	Wind Velocity	1672	2 m/s :: 1m/s	1/day	25 km :: Ocean [South Atlan]	500 m ::
Tapley	Pressure, Sfc	1520	1-5 mb ::	4/day	50 km :: G	N/A :: Sfc
Wielicki	Level-1B Radiance, AVHRR(ESA?)	2355	SW5%, LW2K :: SW2%, LW2K	2/day [d,n]	1 km :: R	N/A :: Atmos
Wielicki	Wind Velocity	1673	5 m/s :: 2 m/s	4/day [d,n]	1.25 dg :: G	1 km :: Atmos

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